IOM UN MIGRATION | GLOBAL DATA INSTITUTE DISPLACEMENT TRACKING MATRIX

# UNDERSTANDING THE NEEDS AND VULNERABILITIES OF CLIMATE-INDUCED MIGRANTS IN IRAQ

## CLIMATE VULNERABILITY ASSESSMENT

JUNE 2025

The International Organization for Migration (IOM) is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.



International Organization for Migration
Address: UNAMI Compound (Diwan 2), International Zone, Baghdad/Iraq
Email: iraqdtm@iom.int
Website: https://iraqdtm.iom.int

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# ACRONYMS

| | |
|---|---|
| **DTM** | Displacement Tracking Matrix |
| **FGD** | Focus Group Discussion |
| **IDPs** | Internally Displaced Persons |
| **IOM** | International Organization for Migration |
| **ISIL** | Islamic State in Iraq and the Levant |
| **MoMD** | Ministry of Migration and Displacement |
| **RARTs** | Rapid Assessment and Response Teams |

# DEFINITIONS

## ENVIRONMENTAL MIGRANTS

Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad.[1]

## CLIMATE MIGRANTS

The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border.[2]

## CLIMATE-INDUCED DISPLACEMENT

Individuals displaced due to drought, water scarcity or other climate-related factors since 2016 (IOM Iraq Operational Definition).[3]

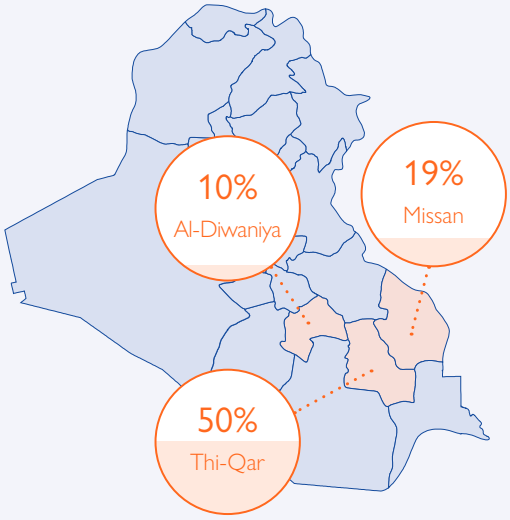
# KEY FIGURES

## DISPLACEMENT

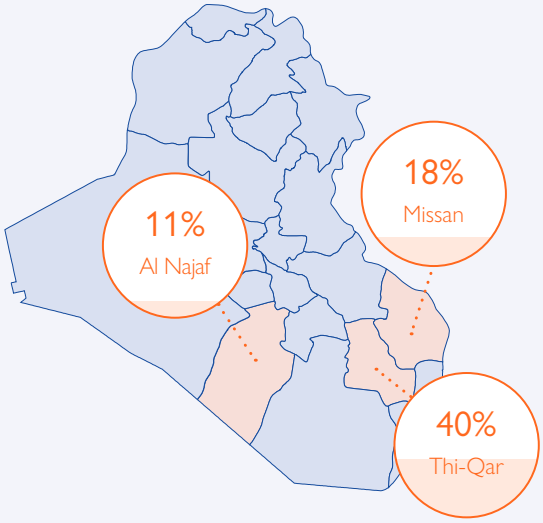
Total displacement

**168,696**
individuals displaced by climatic and environmental factors as of October 2024

Top governorates of origin by percentage of displaced families




Top governorates of displacement by percentage of displaced families




## TOP THREE NEEDS OF CLIMATE-INDUCED MIGRANTS (PERCENTAGE OF LOCATIONS)

**85%** Employment

**51%** Housing

**40%** Infrastructure and services

## LIVELIHOODS (PERCENTAGE OF LOCATIONS)

IN **21%** OF LOCATIONS,
more than half of climate-induced migrants did not have enough money for basic, non-food items.

## HOUSING (PERCENTAGE OF FAMILIES)

**55%** of families rely on irregular housing arrangements

**56%** of families do not have permission to reside on the land

## INTENTIONS (PERCENTAGE OF LOCATIONS)

According to key informants:

In **57%** of locations,
most climate-induced migrants want to locally integrate

In **29%** of locations,
they are undecided or their intentions are unknown

In **10%** of locations,
they want to return

# KEY FINDINGS

Climate change and slow-onset environmental degradation are contributing to the displacement of Iraqi nationals in the central and southern regions of the country. After displacing, however, climate-induced migrants continue to face challenges related to livelihoods, shelter, and infrastructure and services. Firstly, individuals may struggle to find well-paying livelihood opportunities which allow them to meet their basic needs. Secondly, in their new locations, climate-induced migrants often rely on irregular housing arrangements and reside on land without permission. Owing to this economic precarity and informal residence, alongside broader service-related challenges, displaced individuals may also experience difficulties accessing basic services. Despite these issues, key informants suggest that only a minority of climate-induced migrants intend to return. Instead, intentions are divided between those who prefer to remain where they are and those who are uncertain about their future movement plans.

## AREAS OF ORIGIN

In line with previous studies, FGD participants, including both climate-induced migrants and stayees, highlighted challenges related to water scarcity in their areas of origin, which impacted their ability to sustain agricultural livelihoods. A lack of irrigation water contributed to land degradation, reduced crop and fishing yields and the death of livestock. To cope with the loss of income associated with lower yields, participants sold livestock and other assets, reduced spending and sent family members to other locations for work. Among those who displaced, a lack of livelihoods in their area of origin and the economic impacts of the drought were mentioned as the main reasons for leaving. Additionally, the price of land, access to services and availability of assistance influenced the destination chosen. For stayees, engagement in alternative livelihoods enabled some to remain in place, while others did not have the financial means to leave. Among stayees who considered leaving, the future supply of water represented a key determining factor in the decision to stay or displace.

## DISPLACEMENT DYNAMICS

While 473 locations of displacement have been recorded as of October 2024, displacement flows are nevertheless concentrated in a small number of districts in Thi-Qar, Missan and Al Najaf governorates. In terms of origins, nearly half of all climate-induced migrants come from just four districts, namely **Al-Rifa'i** (16%), **Al-Chibayish** (13%) and **Nassriya** (12%) in Thi-Qar Governorate and **Qal'at Saleh** (8%) in Missan Governorate. Additionally, five districts of displacement receive 60 per cent of all displacement flows: **Amara** (13%) in Missan Governorate; **Nassriya** (12%), **Al-Shatra** (12%) and **Al-Chibayish** (12%) in Thi-Qar Governorate; and **Najaf** (11%) in Al Najaf Governorate.

In three quarters of locations, key informants reported that no families returned to their areas of origin this past agricultural season to plant or harvest. This may be related to the risks associated with the agricultural sector, as highlighted in the FGDs. However, key informants in central Iraq (Baghdad, Al Najaf and Salah Al-Din) were slightly more likely to indicate returns to harvest.

## LIVELIHOODS AND MAIN NEEDS

Climate-induced migrants are primarily engaged in low-skilled manual work, services and transportation. However, those who displaced to rural locations continue to engage in agricultural livelihoods, typically as hired hands. In line with the finding above, continued engagement in agriculture appears more common in central Iraq (Al Najaf, Diyala, Babil and Salah Al-Din) as well as Al-Diwaniya.

Food insecurity among climate-induced migrants appears more common in rural locations. Districts of concern are mainly found in Al Basrah, Diyala and Baghdad governorates. This includes **Al-Midaina, Abu Al-Khaseeb, Al-Zubair, Al-Qurna, Basrah** and **Shatt Al-Arab** districts in Al Basrah Governorate; **Al-Khalis** and **Ba'quba** districts in Diyala Governorate; and **Mahmoudiya, Abu Ghraib** and **Karkh** in Baghdad Governorate. Levels of food insecurity were higher in locations where agriculture (self-employed or tenant), domestic work or transport were among the top livelihoods.

The top needs of climate-induced migrants include **livelihoods, shelter,** and **infrastructure and services**. Shelter needs were more commonly reported in rural areas, whereas key informants in urban locations were more likely to mention the need for registration as drought and desertification internally displaced persons (IDPs) with the Ministry of Migration and Displacement (MoMD), which would provide legal recognition, access to assistance and documentation, tenure security and inclusion in social protection systems.[4] By contrast, infrastructure and services were more commonly cited as top needs in peri-urban locations. Disaggregating by geographic area, shelter and livelihood needs appear more pronounced in southern Iraq, especially in Al-Diwaniya, Thi-Qar and Al Muthanna. On the other hand, those in central Iraq highlighted the need for non-food items and registration. Consistent with these findings, focus group discussion (FGD) participants touched on the need for services, particularly schools, health care clinics and paving; financial support and job training; improved tenure security and increased access to water.

## HOUSING AND SERVICES

Climate-induced migrants tend to reside in private settings, while a minority reside in critical shelters.[5] This shelter type is mainly found in **Al-Diwaniya Governorate** and, to a lesser extent, in Al Basrah and Wassit governorates.

Roughly half of climate-induced migrants rely on irregular housing arrangements (i.e. informal, unregulated or unplanned housing structures). This trend is slightly more prevalent in southern Iraq, especially in Al-Diwaniya, Thi-Qar and Al Basrah governorates, as well as Al Najaf Governorate. Moreover, a majority of climate-induced migrants in Salah Al-Din appear to be hosted by others.

Relatedly, less than half of climate-induced migrants have permission to reside on the land, thus increasing the potential for eviction. In terms of land type, around one in two climate-induced migrants live on private land, followed by a quarter on agricultural land. Significant variance can be observed across governorates. Many climate-induced migrants in **Thi-Qar** and **Al-Diwaniya** live on the land without permission. Elevated shares were also indicated in **Al Najaf** and **Al Basrah** governorates.

However, climate-induced migrants generally have access to the public water and electricity supply, although some may rely on unofficial connections. Access to these basic services appears to be worse in central Iraq. In particular, lower shares of climate-induced migrants have access to the public water supply in **Babil, Salah Al-Din** and **Kerbala**, whereas access to public electricity is more limited in **Salah Al-Din, Kerbala** and **Diyala** governorates.

Despite the irregular housing arrangements described above, threats of eviction were reported in only a small minority of locations (<1% of total). Nevertheless, some FGD participants in Al-Haydariya subdistrict in Najaf District, Al Najaf Governorate mentioned facing threats and extortion linked to their housing arrangements.

## SOCIAL COHESION

Key informants suggest relations between climate-induced migrants and the host community are generally positive. Few cases of discrimination were reported and no cases of abuse, violence or exploitation were flagged. Moreover, no incidents of tension, disputes or violence between climate-induced migrants and the host community were captured. Findings from the FGDs generally align with these conclusions. Participants described being welcomed by the host community and taking part in their weddings and funerals. Nevertheless, key informants indicated that relations are more strained in select locations in **Al-Qurna** and **Basrah** districts in Al Basrah Governorate and **Nassriya** District in Thi-Qar Governorate. Moreover, FGD participants in **Markaz Al-Nassriya** indicated that weaker community ties in locations of displacement constrains the freedom of movement of women and girls. This was attributed to weaker community ties and changing responsibilities of girls in the new urban location of displacement.

## INTENTIONS

In roughly half of locations, key informants indicated that **climate-induced migrants intend to stay where they are**. Moreover, in just under one third of locations, climate-induced migrants remain undecided or do not know their future plans. Importantly, key informants reported **intentions to return in only 10 per cent of locations**. However, climate-induced migrants in urban areas appear slightly more likely to return compared to those in rural or peri-urban locations. Across regions, return intentions are higher in governorates like Salah Al-Din, Baghdad and Diyala. In contrast, key informants in Missan, Al Muthanna and Thi-Qar indicate that climate-induced migrants generally prefer to remain where they are. Lastly, climate-induced migrants appear to be more undecided in governorates like Babil, Al Najaf, Wassit, Al Basrah and Al-Diwaniya.

When describing their future intentions, FGD participants mentioned the availability of work and services in their new locations as motivating their desire to remain in their current location of displacement. Additionally, certain participants felt settled and adapted to their new communities, while others expressed a sense of belonging. Nevertheless, the high cost of rent spurred select participants to return to their location of origin.

In a limited number of locations, some climate-induced migrants had already moved elsewhere within Iraq. The main districts from which people secondarily displaced include **Afaq, Diwaniya** and **Hamza** districts in Al-Diwaniya Governorate and **Nassriya District** in Thi-Qar Governorate. Notably, key informants did not report any cases of climate-induced migrants moving abroad.

## PRIORITY GEOGRAPHIC AREAS

The findings above illustrate the wide-ranging needs of climate-induced migrants and variations across governorates and geographic areas. **Thi-Qar** and **Missan** serve as key governorates of origin and destination for climate-induced displacement. Regarding economic precarity, climate-induced migrants are struggling to afford food and other basic items in governorates like **Al Basrah, Baghdad, Diyala** and **Salah Al-Din**. With respect to housing, critical shelters are found in **Al-Diwaniya Governorate** and, to a lesser extent, in **Al Basrah** and **Wassit** governorates. Moreover, issues related to housing tenure and legal permission to reside on the land are most pronounced in **Al-Diwaniya, Thi-Qar, Al Basrah** and **Al Najaf** governorates. On the other hand, challenges accessing basic services were more prevalent in central Iraqi governorates like **Salah Al-Din, Kerbala, Babil, Diyala** and **Wassit**. Concerning social cohesion, lower levels of acceptance were indicated in **Al Basrah** and **Thi-Qar**. Lastly, intentions to remain appear to be higher in governorates like **Missan, Al Muthanna** and **Thi-Qar**.

In summary, climate-induced migrants in **Al Basrah Governorate** require support to reduce their economic precarity; access formal housing in good condition and support their integration within their new communities. Those in **Thi-Qar** also face challenges with respect to the high volume of displacement flows, housing insecurity and community acceptance. Moreover, climate-induced migrants in **Salah Al-Din Governorate** appear to be struggling to meet their needs and access basic services. Lastly, a variety of housing challenges can be observed in **Al-Diwaniya Governorate**.

# INTRODUCTION

Climate change is heightening the intensity and severity of extreme weather events,[6] while also fuelling gradual changes in the environment.[7] Iraq is witness to both sets of effects in the form of changing temperature and rainfall patterns, increasingly severe and prolonged drought, frequent sand and dust storms, intense flooding, soil and water salinization, land degradation and desertification.[8, 9, 10, 11] Beyond greenhouse gas emissions, other practices related to water governance, distribution and utilization in Iraq and neighbouring countries have decreased the availability of water, particularly in areas further downstream of the Tigris and Euphrates Rivers.[12, 13] These changes in the environment have worsened living conditions, impacted the health of Iraqis and rendered engagement in climate-sensitive livelihoods such as farming and livestock rearing increasingly unsustainable.[14, 15, 16]

Consequently, a growing number of Iraqis are leaving rural communities in favour of both urban and rural locations with greater livelihood opportunities and environmental resources. Since June 2018, the International Organization for Migration's (IOM) Displacement Tracking Matrix (DTM) in Iraq has monitored the number of individuals displaced due to climate change and environmental factors.[17] As of October 2024, 28,116 families (168,696 individuals) remain displaced across 12 governorates in central and southern Iraq.[18] To better understand the drivers of these movements, IOM DTM conducted a Climate Vulnerability Assessment in the locations from which people were leaving (i.e. locations of origin for climate-induced displacement), exploring the prevalence of various environmental hazards, availability of irrigation water, access to services, impacts on climate-sensitive livelihoods, adoption of coping strategies and occurrences of tension and conflict related to environmental resources.[19]

However, less is known about the needs and vulnerabilities of those displaced after leaving their areas of origin. A joint study conducted by IOM and Social Inquiry entitled *Migration into a Fragile Setting: Responding to Climate-Induced Informal Urbanization and Inequality in Basra, Iraq* explored the living conditions and integration of migrants within Basra City.[20] A random sample of migrants and local residents were surveyed to obtain a representative picture of living conditions for all community members.[21] Additionally, respondents were surveyed by street, allowing for comparison of neighbourhoods with a high- and low-proportion of migrants.[22] Migrants primarily left their areas of origin due to a combination of economic and environmental factors such as water scarcity, livestock deaths and crop failures.[23] After moving, they struggle to access well-paying, regular employment.[24] Moreover, those residing in high-migration neighbourhoods within the city were more likely to reside in critical or rudimentary shelters on public land without permission, which put them at greater risk of eviction.[25] Furthermore, a greater share of households in high-migration neighbourhoods relied on unofficial connections to the water and electricity supply; lacked paving and public lighting; and faced exclusion related to livelihoods, housing and basic services.[26] Finally, local residents appeared to hold negative perceptions of migrants, attributing to these newcomers issues such as increased competition for jobs, a strain on resources and tensions in the community.[27]

Building off the Climate Vulnerability Assessment conducted in locations of origin and the Basra study, this assessment examines the living conditions of climate-induced migrants across all locations of displacement identified through IOM DTM's Climate-Induced Displacement Tracking. Based on findings from the previous assessments, themes such as displacement dynamics, livelihoods and main needs, housing and services, social cohesion and future movement intentions were incorporated into this study. By expanding the assessment to cover all locations of displacement, the study allows stakeholders to identify highly vulnerable geographic areas in need of support. Moreover, the thematic analysis can inform sector-specific interventions for programming. Lastly, the report's insights enable the development of evidence-based policies to enhance the integration of climate-induced migrants.

The report is structured as follows. After a brief description of the methodology, findings from the FGDs on conditions in areas of origin linked to climate-induced displacement are explored. Next, displacement dynamics are analysed, including key areas of origin and displacement, largest flows, year of displacement, remaining ties to areas of origin and secondary displacement. The next section describes the main job occupations of climate-induced migrants, their capacity to afford food and other basic needs and their most important unmet needs. In the subsequent section, access to housing is considered through indicators on shelter conditions, housing tenure and land type and threats of eviction. Evaluation of access to basic services such as public water and electricity is also included within the same section. Thereafter, various dimensions of social cohesion are examined, including cases of discrimination; abuse, violence and exploitation; and tension or conflict with members of the host community. Key informants also evaluated the degree to which climate-induced migrants are accepted by the host community. The last section describes the long-term movement intentions of climate-induced migrants, noting instances where climate-induced migrants left for other locations within or outside Iraq.

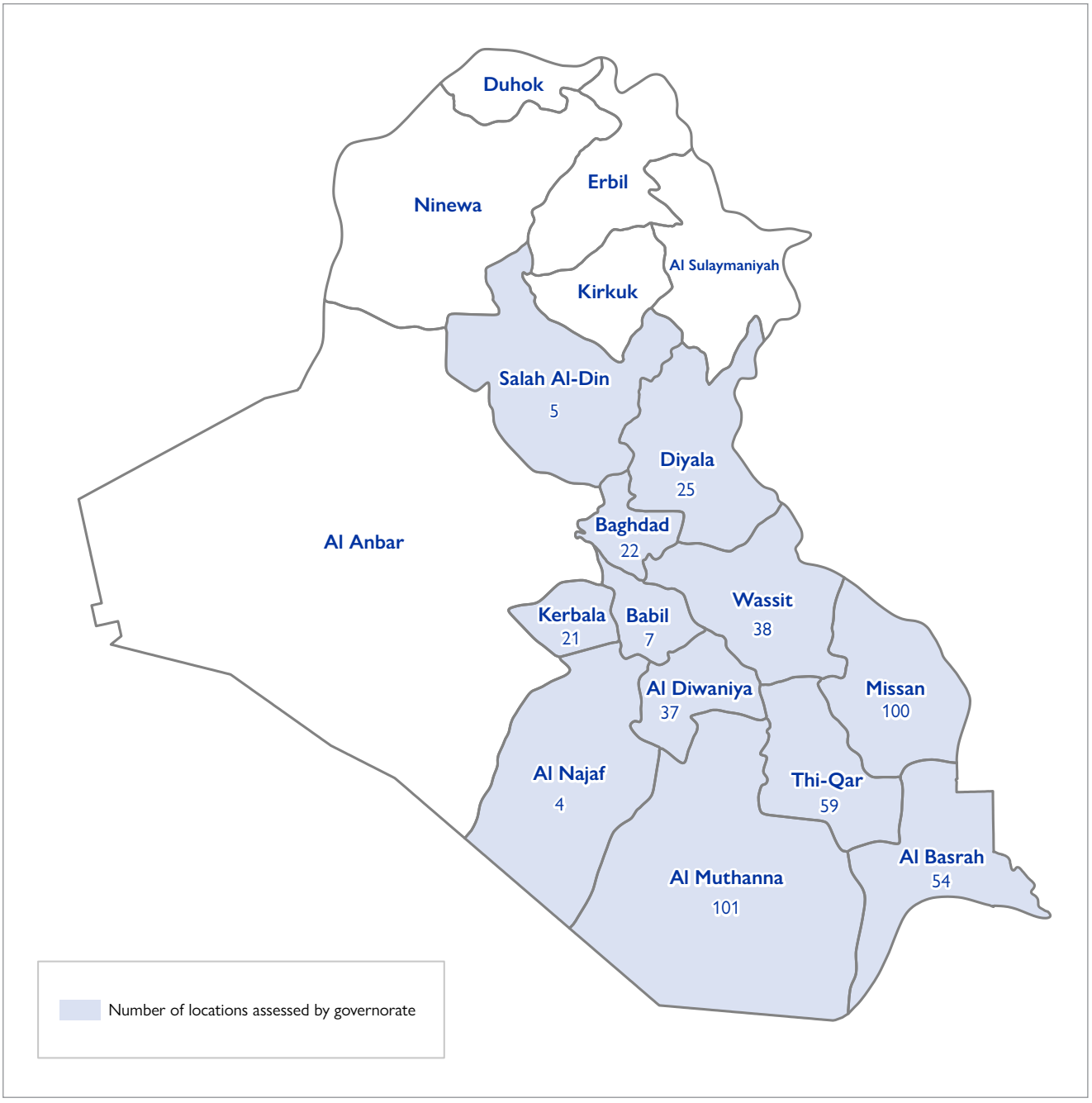
# METHODOLOGY

## KEY INFORMANT INTERVIEWS

This assessment primarily centres on key informant interviews conducted by IOM's Rapid Assessment and Response Teams (RARTs), who are deployed across Iraq (20% of enumerators are female). IOM RARTs collect data utilizing a large and well-established network of KIs, including community leaders, mukhtars, local authorities and security forces (99% of KIs for this assessment were men). Locations targeted for this assessment have been identified by DTM Iraq's RARTs from the Climate-Induced Displacement Tracking caseload as the locations of displacement for families displaced due to environmental factors, including droughts, increased water salinity, biodiversity loss, soil degradation, changing rainfall patterns, increased temperature, sand/dust storms and landslides.[28]

Families displaced by environmental factors are grouped separately from those displaced by the 2014–2017 conflict. In rare instances where families were displaced by both the conflict and environmental conditions, these families are included in both the climate displacement caseload and the conflict displacement caseload. Such is the case in Diyala Governorate, where some families were displaced by the conflict with the Islamic State in Iraq and the Levant (ISIL) then returned to their area of origin, only to be re-displaced by drought.

Map 1: Number of locations assessed by governorate



Data collection for this assessment took place between September and October 2024 from 473 locations of displacement containing 28,116 families in 50 districts across 12 governorates of Iraq. Assessment coverage is restricted to locations toward which climate-induced displacement has been observed. To date, these locations are exclusively located in the central and southern regions of Iraq.[29]

## FOCUS GROUP DISCUSSIONS

To complement the quantitative component described above, four FGDs were carried out with a total of 30 participants. Among these, two FGDs were conducted in locations of origin linked to climate-induced displacement to capture the perspectives of stayees (that is, those who have not displaced). The remaining two FGDs took place in locations of displacement with climate-induced migrants. One of the two FGDs in locations of displacement was conducted exclusively with female participants to account for their unique needs and points of view. For future assessments, it is recommended to expand the number of FGDs conducted with women, especially in areas of origin.

Two tools were designed to capture dynamics in locations of origin and displacement. The discussion guide for locations of origin explored living conditions, observed changes in the environment, migration experiences, future movement intentions and solutions to address community issues. The areas of displacement discussion guide considered living conditions in the area of origin, observed changes in the environment, decision-making related to the displacement, ongoing ties to their area of origin, living conditions in their areas of displacement, different experiences between men and women, main challenges in current location, future movement intentions and solutions to improve their situations. The tools were developed in collaboration with Social Inquiry, which specializes in mixed-methods research on displacement in Iraq.[30]

The locations for the FGDs were selected based on the displacement levels captured through the Climate-Induced Displacement Tracking activity and vulnerability criteria from the previous Climate Vulnerability Assessment.[31, 32] Additionally, the locations reflect a variety of displacement dynamics. Firstly, both a rural and urban area of displacement were included. Secondly, the locations account for intra-district, intra-governorate and extra-governorate displacement. Beyond this, operational constraints and locations of IOM climate-related programming also influenced the locations selected.

Table 1: List of FGDs conducted by target group, geographic area and number of participants

| TARGET GROUP | SUBGROUP | LOCATION TYPE | GOVERNORATE | DISTRICT | SUBDISTRICT | NUMBER OF PARTICIPANTS |
|---|---|---|---|---|---|---|
| Stayees | Men | Rural | Thi-Qar | Nassriya | Al-Islah | 8 |
| | | | | | Saed Dakheel | 6 |
| Climate-induced migrants | Women | Urban | | | Thi-Qar | 8 |
| | Men | Rural | Al Najaf | Al Najaf | Al-Haydariya | 8 |

In Thi-Qar, FGD participants were selected by the *Qaim Maqam* (District Commissioner) of Nassriya District and then by the *mukhtar* (community leader) of each subdistrict. In Al Najaf, the participants were also selected in coordination with the mukhtar of Al-Haydariya.

The FGDs in Saed Dakheel and Al-Islah took place in the guesthouse of a tribal leader, while the FGD in Markaz Al-Nassriya was held at the office of the Director of Agricultural Guidance. In Al-Haydariya, the FGD was organized at the mukhtar's house.

The FGDs took place in October 2024 and lasted approximately 90 minutes each. One staff member facilitated each FGD for consistency, while RART members took notes. The FGDs were conducted in Arabic and translated into English for analysis.

## DEFINITIONS

### Environmental and climate migration

There is currently no legal or internationally accepted definition for people moving in response to environmental factors. Nonetheless, in 2007, IOM developed a working definition of 'environmental migrants,' which highlights the diversity of environmental triggers for movement, the varying lengths of time for such movement, the degree to which these movements are voluntary and the potential destinations for these individuals.

'*Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad.*'[33]

Climate migration forms a subset of environmental migration, with individuals leaving their habitual place of residence due to changes in the environment linked to climate change. IOM defines climate migration as:

'*The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment* due to climate change*, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border* (emphasis added).'[34]

This assessment focuses on families 'displaced… due to drought, water scarcity or other climate-related factors since 2016.'[35] In other words, it targets a subset of migrants who were forced to move due to climatic conditions. Accordingly, the report will refer to this phenomenon as climate-induced displacement, while those who have been displaced by environmental factors as 'climate-induced migrants.' Within this term, 'climate' acts as an umbrella term for extreme weather events, environmental degradation and slow-onset changes in the environment. The word 'induced' underscores the multi-causal nature of such movements, with environmental and economic factors

deeply intertwined, as well as the often-indirect relationship between slow-onset changes in the environment and mobility.[36, 37] Lastly, the word 'displacement' refers to the observation that climate change is worsening living conditions and thus compelling individuals to leave their areas of origin, often permanently, regardless of their preference to stay in or leave the area.

## LIMITATIONS

Data for the quantitative component of this assessment were collected at the location level. This means that key informants were interviewed about the conditions faced in locations of displacement for climate-induced migrants. These locations correspond to a village for rural areas or a neighbourhood for urban areas (that is, the fourth administrative division). While this approach allows extensive coverage over a short period of time, it often relies on one informant per location. These key informants are mainly men serving as mukhtars and community or local council representatives who report on the views and experiences of a potentially large and diverse population, which might lead to limited representation for smaller groups with distinct characteristics or discrepancies caused by social desirability bias. As a result, the more subjective components of this assessment (e.g., social cohesion and future migration intentions) should be interpreted with caution. Moreover, as key informants may be unaware of cases of discrimination, exploitation and abuse, the absence of confirmed cases should not be interpreted as the absence of vulnerability. Furthermore, key household characteristics including sociodemographic indicators (e.g., the number of family members) and vulnerability factors (e.g. the sex of the head of household or number of members living with a disability) are not accounted for in this dataset. Consequently, it is recommended to follow up this location-level, key information-based assessment with a household or individual survey. Future studies should also aim to diversify the profile of key informants interviewed in terms of sex, age, ethnicity, ability and area of expertise.

With respect to the FGDs, the findings cannot be generalized to the overall population of stayees or climate-induced migrants, given the nature of this research method. Additionally, participants may be influenced by the social desirability bias described above, particularly considering the lack of anonymity in an FGD. Moreover, group dynamics and power imbalances in terms of age, status and other factors may influence the willingness and ability of participants to share their unique views. Lastly, the presence of community leaders and authorities during the FGDs may have shaped the responses elicited regarding the role of the local leadership.

# AREAS OF ORIGIN

This section draws on FGDs conducted among stayees in locations of origin linked to climate-induced displacement, as well as climate-induced migrants in locations of displacement, to describe living conditions in areas of origins. Various challenges are highlighted, from environmental hazards to financial losses to limited services. The section then discusses the coping strategies adopted to manage changes in environmental conditions. Lastly, migration experiences and decision-making are explored, including reasons for leaving and remaining, the main decision-maker(s) and the funding sources for the move. These findings reflect the views of a small number of FGD participants and should not be interpreted as representative of all climate-induced migrants.

## MAIN CHALLENGES IN AREAS OF ORIGIN

According to FGD participants, **water scarcity** is significantly impacting living conditions in their areas of origin. This aligns with findings from the Climate Vulnerability Assessment conducted in locations of origin linked to climate-induced displacement, which highlighted water issues as the top predictor of climate-induced depopulation.[38] Participants who displaced to Al-Haydariya and Markaz Al-Nassriya highlight drought and water scarcity as either 'the biggest challenge' or 'one of the key challenges' in their areas of origin. Other environmental hazards mentioned include drought, soil salinity and dust participles in the air.

These changes, in turn, hindered the ability of participants to continue farming, livestock rearing and fishing. In particular, water scarcity caused land and soil degradation, a reduction in crop and fishing yields and the death of livestock. Certain participants had opted to sell livestock or decrease the number of dunums[39] planted in response. These negative effects on their livelihoods, in turn, compromised the economic well-being of participants. They experienced a loss of income and livelihood opportunities and accumulation of debt after unsuccessful planting seasons. In Saed Dakheel, participants also needed to buy products they could formerly grow or obtain from livestock, thus increasing their spending. Moreover, a participant working in a brick factory in Al-Islah describes the reverberations of the decline of agriculture in other sectors of the economy. The weakened financial position of the community compromised their ability to build houses, thus impacting the productivity of the factory and the participant's income. With respect to alternative livelihoods, certain participants, especially stayees, had other income sources through government employment or pensions. In other cases, participants engaged in daily construction work, rented farmland in other locations, drove taxis or relied on the social welfare subsidy.

**Lack of basic services** like water, health care, schools, sewage and paving also represented a key challenge in locations of origin. In Saed Dakheel, the community provided electricity and water at their own expense, repaired breakdowns and paved their roads. Moreover, in both Saed Dakheel and Al-Islah, the community had land allocated for a school but did not have the money for construction. As a result, participants in Al-Islah relied on a school made of caravans without a latrine. This has contributed to formal complaints and protests over the lack of services in Al-Islah.

## COPING STRATEGIES

To manage the economic impacts of the changing environment, participants adopted a range of coping strategies. According to the Climate Vulnerability Assessment, engagement in coping strategies was a leading predictor of high levels of climate-induced depopulation.[40] As described in the FGDs, participants sold livestock due to water scarcity, an inability to afford fodder or other expenses and livestock deaths. Other participants mentioned selling their vehicles to cover expenses related to agriculture. As noted above, certain participants turned to different livelihood opportunities, especially daily construction work. In other cases, participants borrowed money or reduced their daily expenses. In the words of a participant in Al-Haydariya, 'we were all forced to reduce our daily expenses, which affected the quality of our food, clothes and even school requirements.'

Beyond these strategies, participants also sent family members to other locations for work. As mentioned by certain participants in Al-Islah, family members would engage in circular migration, leaving for one month and returning for one week in a cyclical fashion. Additionally, a participant in Al-Islah described migrating on an as-needed basis for work: 'Sometimes, I must go to Basra, because I work as a driver, because of the lack of jobs in our area.' Moreover, for certain participants in Al-Haydariya, a few family members would leave first, with the rest of the family following based on the availability of work. As described by a participant in Al-Haydariya: 'My children moved first to Al Najaf for work and when they started working, they used to send us money to cover our expenses in the area of origin. They used to sleep in hotels or processions, so we decided to migrate to Al Najaf for family reunification in addition to searching for other job opportunities.' Thus, a family's movement to a new location may occur over several distinct phases. In this case, remittances between locations of displacement and origin helped cover the movement of the remaining family members.

Notably, when the migration of one or a few family members was mentioned, those leaving were often 'children,' 'sons' or 'brothers.' This suggests that those leaving, or at least the first ones to leave, tend to be younger and male. Moreover, these individuals left for other governorates like Al Basrah, Kerbala, Missan and Al Najaf, in contrast to the more localized trends observed in the Climate-Induced Displacement Tracking activity.[41] However, further quantitative analysis is needed to generalize trends regarding the direction and composition of these mobility patterns.

## MIGRATION DECISION-MAKING

The FGDs also shed light on the decision-making process to leave or remain in the area of origin. In Al-Haydariya and Markaz Al-Nassriya, the decision to leave was made by the head of household. For certain female participants in Markaz Al-Nassriya, the decision was made by their husbands. As noted above, those in Al-Haydariya joined their children in the new location, while those in Markaz Al-Nassriya left with their children.

Participants highlighted a **lack of livelihood opportunities** in their areas of origin as an important driver of these movements. One participant in Al-Haydariya describes exhausting all his options before deciding to leave:

> *'It was not an easy decision, but we tried everything; we worked in construction but failed; then we tried to buy a taxi but we faced the same problem, which is a lack of work, which prompted us to make the decision to migrate to an area close to the city.'*

Among those in Markaz Al-Nassriya, 'the decision was made based on our financial suffering and lack of resources and job opportunities in the area of origin because of the drought.' In Al-Haydariya, other drivers include the inexpensive price of land and the availability of assistance from local community members during religious events. For certain participants in Markaz Al-Nassriya, access to services like health care was an important draw.

Participants in Al-Haydariya and Markaz Al-Nassriya financed their move by selling assets and borrowing money. Those in Al-Haydariya described the cost of moving as low. Once in the new location, they slowly constructed their homes when money was left over from their children's earnings. Certain participants were living in unfinished houses at the time of the FGD.

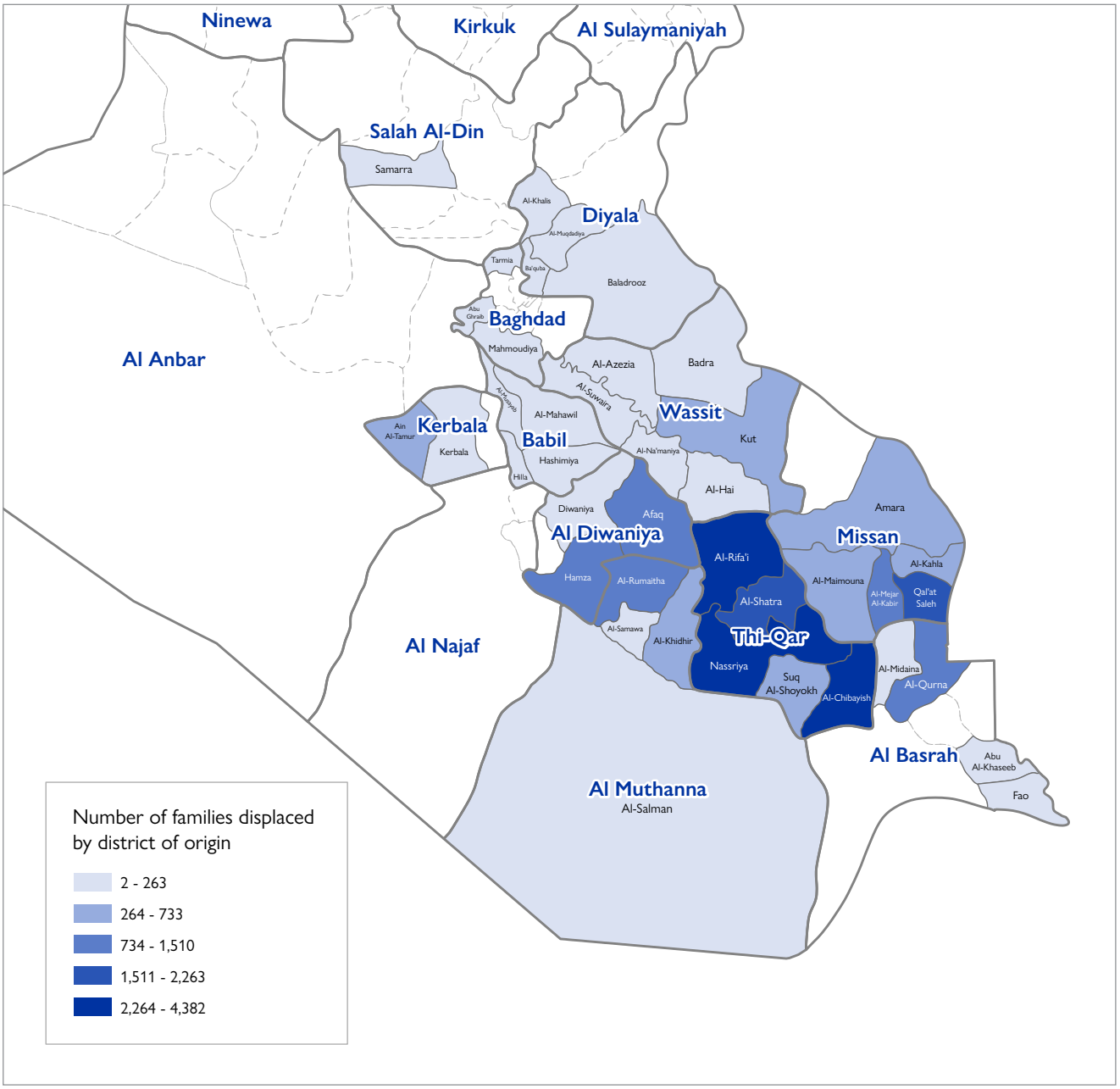
Stayee participants in Saed Dakheel and Al-Islah expressed mixed intentions regarding future movement plans. Among those who intended to remain in their area of origin, the availability of alternative livelihoods or income encouraged certain participants to stay. Factors such as family ties and age also discouraged participants from leaving. Among those who were undecided in their intentions, **the future supply of water represented a key determining factor** as it would influence their ability to engage in agriculture. In fact, certain participants in Al-Islah stated they will wait for a fixed period of time to see if water levels increase or other job opportunities present themselves before moving to another governorate. In their new location, they intended to engage in agriculture or construction. In Saed Dakheel, the availability of services was another factor influencing the decision to stay or leave, along with the access of water. Certain participants in Saed Dakheel also expressed hope in the Government to support agriculture, increase the supply of water and provide services. Lastly, a participant in Al-Islah stated he lacked the financial means to leave the area, while another said he did not have the funds to migrate with his entire family. These participants and their families can be considered part of the 'trapped population' who want to leave but are unable to do so.[42] This group may be more vulnerable to the effects of climate change than those who are compelled to move because they cannot move to locations with more job opportunities, access to services and potentially fewer environmental hazards.

# DISPLACEMENT

This section describes important trends for climate-induced displacement in Iraq, including overall figures, areas of origin, areas of displacement, flows, location type and secondary displacement. It also discusses the extent to which climate-induced migrants return to their locations of origin to engage in agriculture. This indicator sheds light on the ties climate-induced migrants maintain to their origin areas and the degree to which their displacement can be considered temporary or permanent.

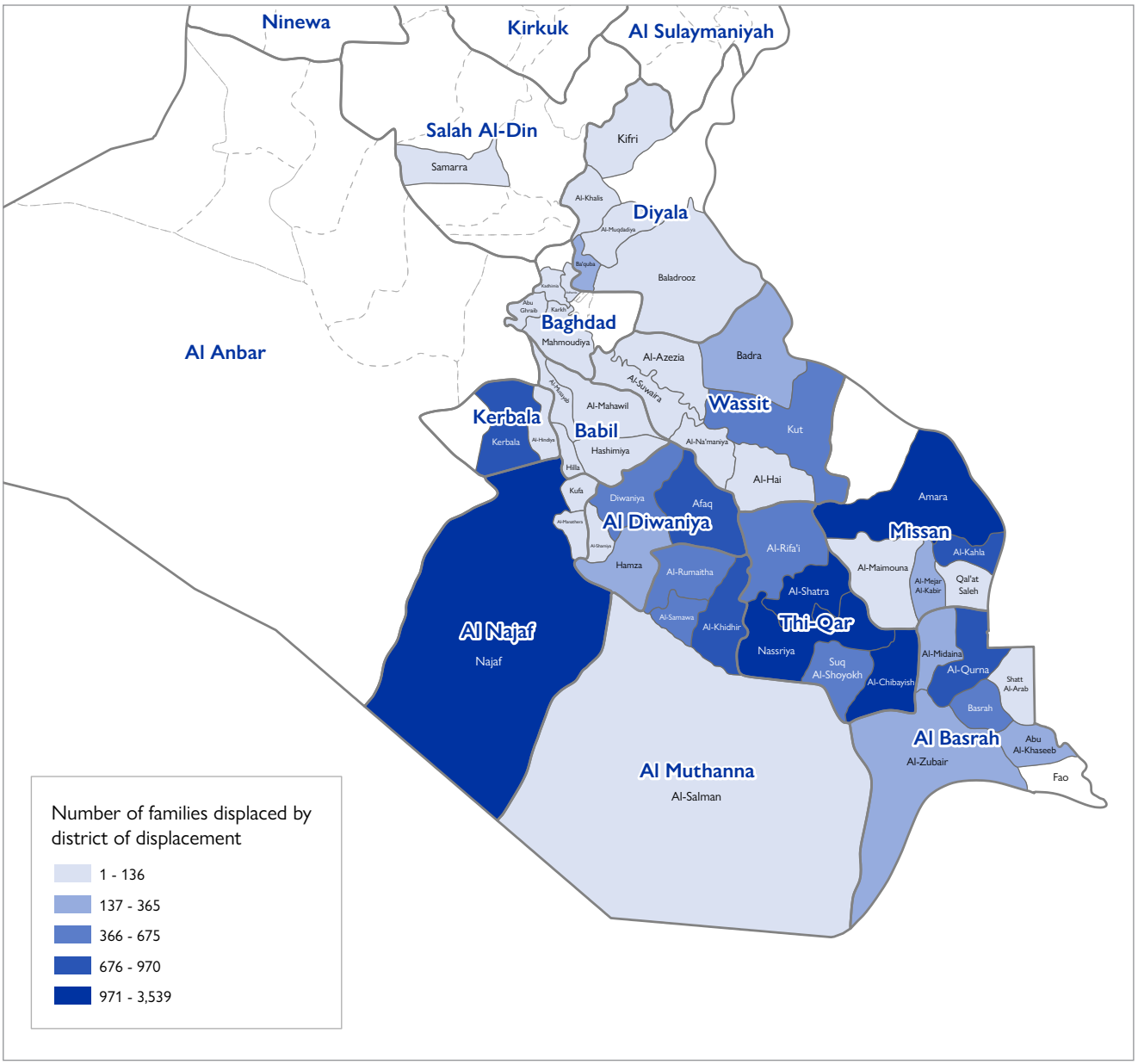
As of October 2024, 168,696 individuals remain displaced across 12 governorates in central and southern Iraq due to climatic and environmental factors. This figure excludes those who have returned to their location of origin after displacing.

Map 2: Districts of origin for climate-induced displacement



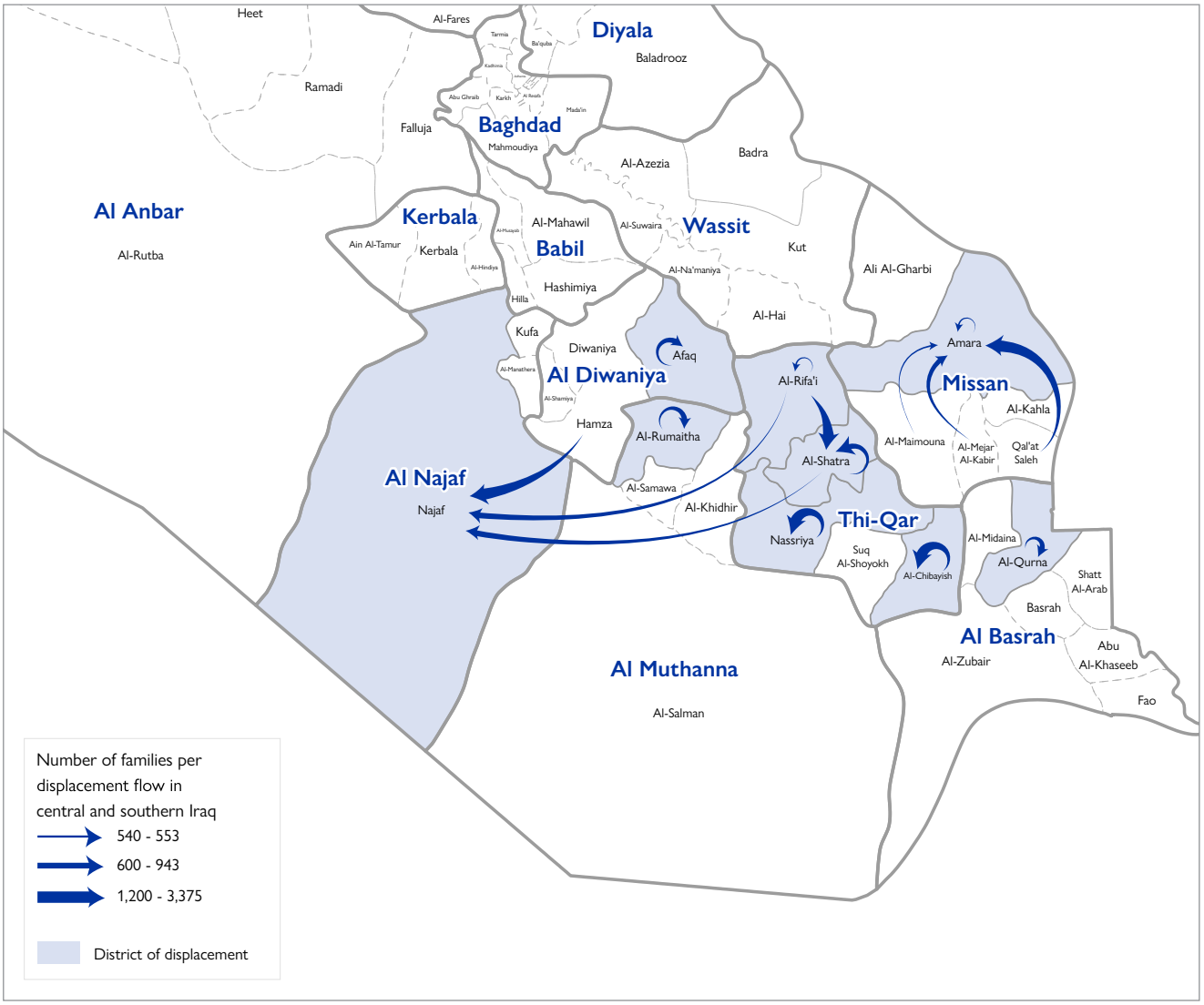

Half of those displaced originate from Thi-Qar Governorate (50%), while a fifth come from Missan Governorate (19%) and a tenth from Al-Diwaniya (10%). Just four districts account for nearly half of flows (49%), namely **Al-Rifa'i** (16%), **Al-Chibayish** (13%) and **Nassriya** (12%) in Thi-Qar Governorate and **Qal'at Saleh** (8%) in Missan Governorate. Key subdistricts of origin include **Al-Nasr** (13%), **Markaz Al-Chibayish** (13%), **Al-Battha'a** (7%) and **Al-Dawaya** (7%) in Thi-Qar; **Al-Azir** (6%) and **Al-Khair** (4%) in Missan Governorate; **Al-Shinafiya** (5%) in Al-Diwaniya Governorate; and **Al-Thagar** (4%) in Al Basrah Governorate.

Map 3: Districts of displacement for climate-induced displacement



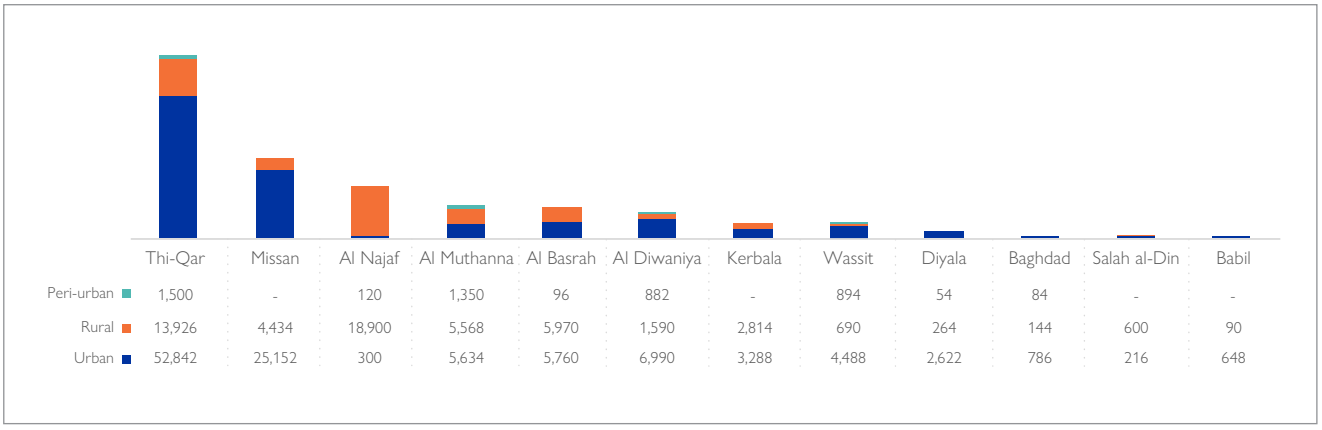

Those displaced by climatic factors primarily move to **Thi-Qar** (40%), **Missan** (18%) and **Al Najaf** (11%). Areas of displacement are similarly concentrated across five districts: **Amara** (13%) in Missan Governorate; **Nassriya** (12%), **Al-Shatra** (12%) and **Al-Chibayish** (12%) in Thi-Qar Governorate; and **Najaf** (11%) in Al Najaf Governorate. Together, these districts receive 60 per cent of all climate displacement flows. Key subdistricts of displacement include **Markaz Al-Chibayish** (11%), **Markaz Al-Shatra** (9%), **Al-Battha'a** (6%), **Al-Islah** (3%), **Al-Dawaya** (2%) and **Markaz Al-Nassriya** (2%) in Thi-Qar Governorate; **Markaz Al-Amara** (13%) in Missan Governorate; **Al-Haydariya** (11%) in Al Najaf Governorate; **Markaz Al-Khidhir** (3%) in Al Muthanna Governorate; **Markaz Kerbala** (2%) in Kerbala Governorate and **Markaz Al-Qurna** (2%) in Al Basrah Governorate.

Map 4: Top 15 climate-induced displacement flows in central and southern Iraq[43]




Displacement flows tend to be localized, with 83 per cent of those displaced moving within the same governorate and 52 per cent within the same district. Intra-governorate displacement is especially pronounced in Thi-Qar, which accounts for 40 per cent of all flows, and Missan, which accounts for 18 per cent. Among those leaving their governorate of origin, most move toward Al Najaf (67% of extra-governorate flows) and, to a lesser extent, Kerbala (14%) and Al Muthanna (11%).

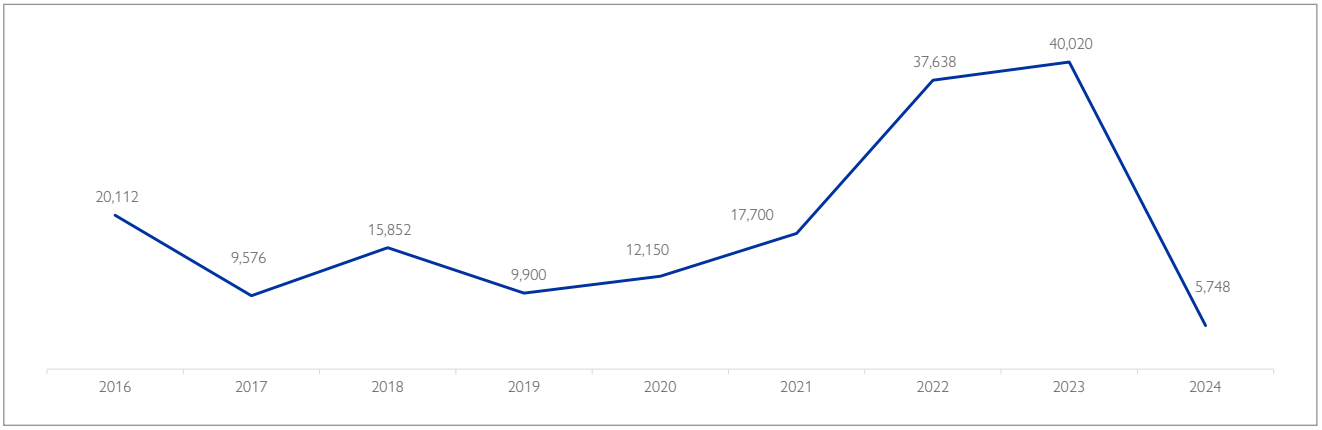
Figure 1: Number of individuals displaced by governorate of displacement and location type (rural, urban or peri-urban)



| | Thi-Qar | Missan | Al Najaf | Al Muthanna | Al Basrah | Al Diwaniya | Kerbala | Wassit | Diyala | Baghdad | Salah al-Din | Babil |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peri-urban | 1,500 | - | 120 | 1,350 | 96 | 882 | - | 894 | 54 | 84 | - | - |
| Rural | 13,926 | 4,434 | 18,900 | 5,568 | 5,970 | 1,590 | 2,814 | 690 | 264 | 144 | 600 | 90 |
| Urban | 52,842 | 25,152 | 300 | 5,634 | 5,760 | 6,990 | 3,288 | 4,488 | 2,622 | 786 | 216 | 648 |

Just under two thirds of families move toward urban locations (64%), while a third move toward rural locations (33%). As illustrated in Figure 1, displacement toward Al Najaf and Salah Al-Din tends to be more rural. In contrast, families moving to Diyala, Babil, Missan, Baghdad, Thi-Qar, Al-Diwaniya and Wassit usually reside in urban locations. Moreover, climate-induced migrants who move within their governorate of origin often displace to urban locations (74%). By contrast, those leaving their governorate of origin typically reside in rural locations (81%), especially in Al Najaf.

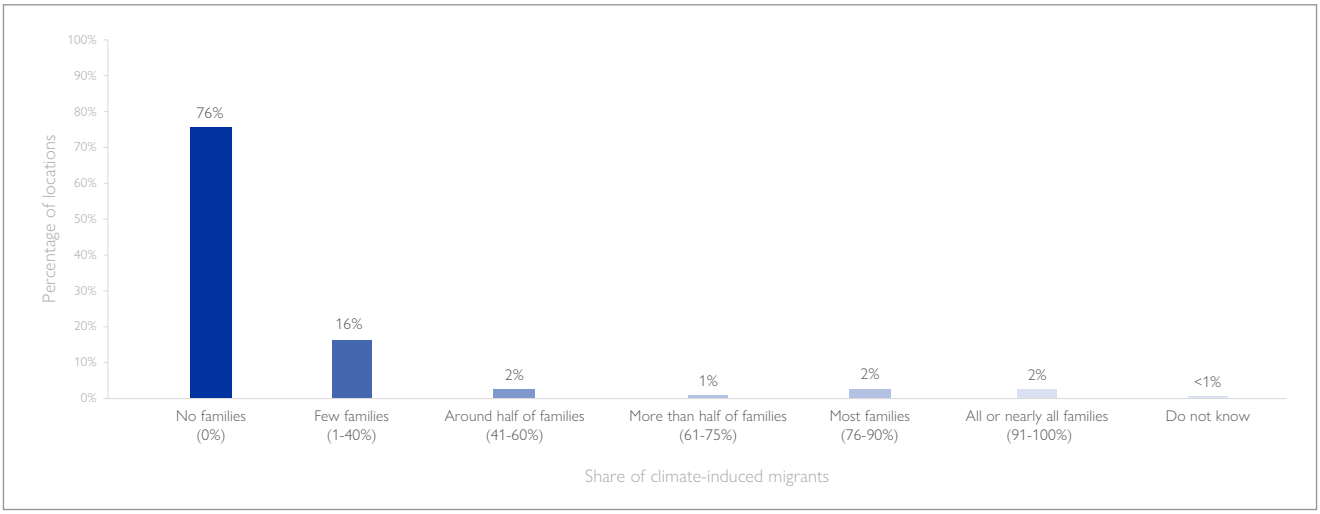
Figure 2: Number of individuals displaced by year of displacement




In terms of time trends, flows occurring during or before 2016 account for 12 per cent of all flows. In subsequent years (2017 – 2020), flows declined slightly before increasing sharply from 2021 to 2023. However, the number of those displaced fell substantially in 2024 due to increased rainfall, improved water management and restrictions on water-intensive crops and activities.

In southern Iraq, governorates like Missan began to receive climate-induced migrants as early as 2016. While the peak of flows varies across governorates, those displacing to Thi-Qar increased dramatically in 2022 and 2023. In central-southern Iraq, flows toward Al Najaf rose in 2016 and 2022, before peaking in 2023. Displacement toward Al-Diwaniya and, to a lesser extent, Wassit has also grown since 2022. Lastly, displacement toward central-northern governorates like Diyala and Salah Al-Din was only observed beginning in 2022. Thus, families began to move toward southern governorates and Al Najaf at an earlier stage than in central-northern Iraq.

Figure 3: Extent of climate-induced migrants returning to harvest by percentage of locations




To determine the extent to which climate-induced migrants returned for agricultural activities, key informants were asked to estimate the share of migrants who returned to their locations of origin to harvest during the last agricultural season. In three quarters of locations, key informants reported that no families returned to harvest. Returns to harvest were more commonly reported in central governorates like Baghdad, Al Najaf and Salah al-Din, while few such returns were observed in southern governorates like Al Muthanna, Al Basrah, Missan and Thi-Qar.

FGD participants who displaced described limited connection to their location of origin. Firstly, participants in Al-Haydariya and Markaz Al-Nassriya refer to the land in their area of origin as 'barren' and thus unsuitable for agriculture. Moreover, the risks associated with the agricultural sector were underscored, as productivity depends on favourable environmental conditions and availability of natural resources. Beyond this, certain participants do not return due to a lack of family or connection in their area of origin, as mentioned within the FGD in Markaz Al-Nassriya. In other cases, climate-induced migrants may return only for special occasions.

Finally, the assessment considered levels of secondary displacement linked to climate change and environmental degradation. This typically entails initial displacement due to the 2014-2017 crisis with ISIL. Upon return, however, drought, water scarcity and other environmental factors make it difficult to resume agriculture and cause some to re-displace. In other cases, individuals may re-displace while still in internal displacement. This trend is fairly limited, accounting for just 1 per cent of all displacement flows observed (972 individuals out of 168,696 in total). Secondary displacement was mostly observed within Diyala Governorate (80% of flows) as well as Al Basrah Governorate (16%). At the district level, secondary displacement was recorded within Ba'quba District (41% of secondary displacement flows), Diyala Governorate; from Ba'quba District toward Al-Khalis District (26%) in Diyala Governorate; within Al-Qurna District (10%) in Al Basrah Governorate and within Kifri District (6%) in Diyala Governorate.

However, as captured in the FGDs, individuals may move multiple times because of climatic or economic factors. A participant mentioned moving to Kerbala as a result of drought in his area of origin. However, owing to the high cost of living, he moved from Kerbala to Al Najaf and abandoned farming.

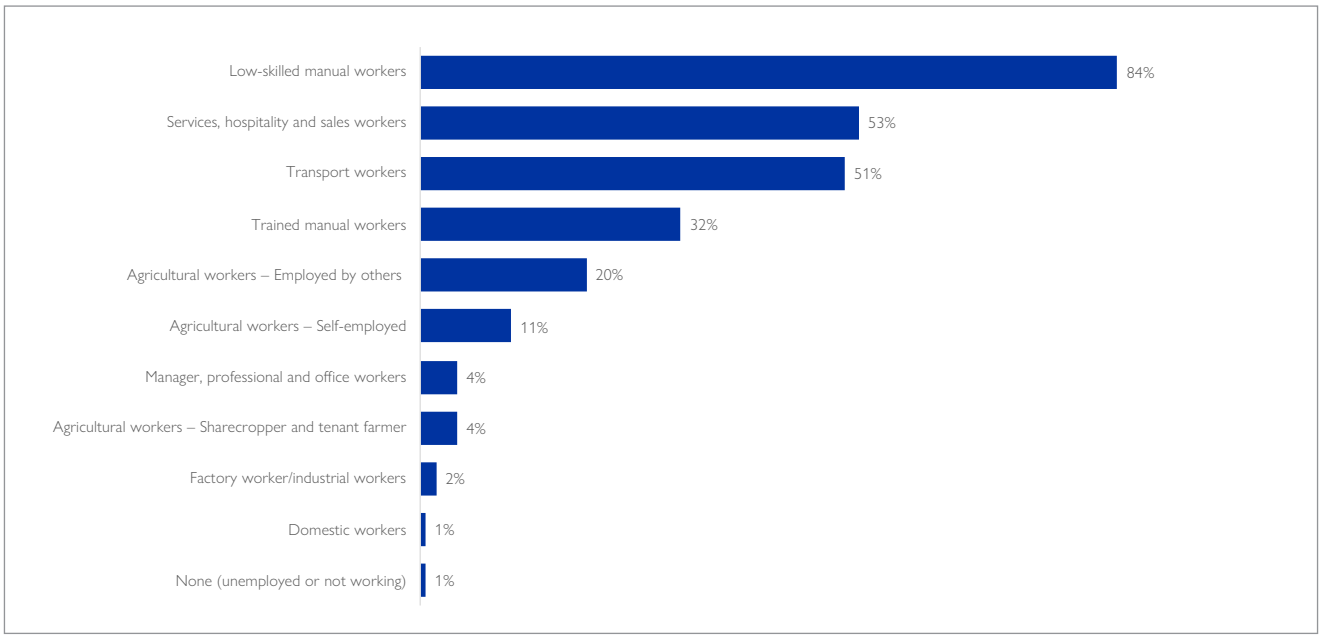
# LIVELIHOODS

Given the economic challenges faced by families in locations of origin, access to stable, well-paying livelihoods is a critical concern for those displaced by climatic factors. If relocating to other rural locations, climate-induced migrants may continue to work in agriculture, often as hired hands on other people's land. Those leaving for urban environments, on the other hand, must find alternative livelihoods outside their traditional skillset and experience in agriculture. Additionally, as expressed by FGD participants in Markaz Al-Nassriya, the cost of living may be higher in the new location, adding further pressure to the job search. The financial status of climate-induced migrants, in turn, has direct consequences for their overall standard of living, as it affects their ability to access housing in good condition and basic services. Accordingly, this section of the report measured economic well-being through three criteria: 1) the main job occupations practiced in the location, 2) the ability of families to afford food and basic goods and 3) remaining unmet needs.

## MAIN JOB OCCUPATIONS

The most common areas of employment for climate-induced migrants are in low-skilled manual work (84%); services, hospitality and sales (53%); and transportation (51%). In rural locations, agriculture continues to feature among the top livelihoods for climate-induced migrants, most likely reflecting their desire to engage in their traditional area of work. Migrants working in agriculture tend to be employed by others rather than renting the land or relying on self-employment. Engagement in agriculture appears more common in central Iraq, specifically Babil (86%), Al Najaf (75%), Diyala (44%), Salah Al-Din (40%), as well as Al-Diwaniya (97%). However, as with their city-based counterparts, climate-induced migrants in rural locations also work in transportation and services. Participants in focus group discussions reported engaging in daily wage work, particularly in construction, but also relying on the social welfare subsidy or assistance from religious organizations, the community or other family members.

Figure 4: Top livelihoods by percentage of locations (up to three answers permitted)

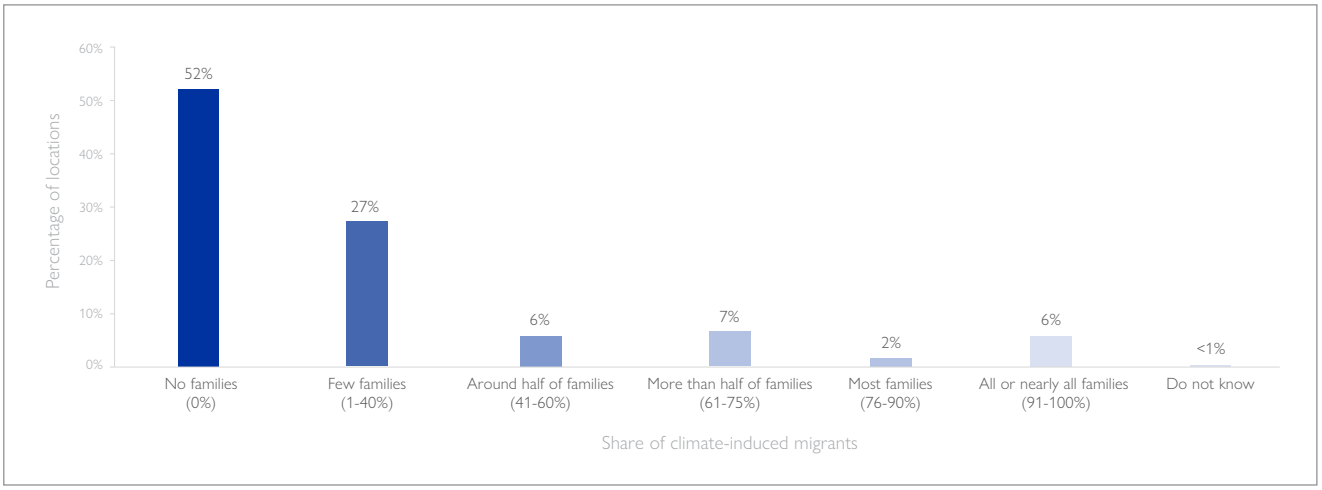


## ECONOMIC WELL-BEING

Even if they find work in their new locations, climate-induced migrants may nevertheless struggle to meet their basic needs. In 15 per cent of locations, more than half of families did not have enough money for food. A slightly higher share of rural locations met this threshold compared to urban locations (18% vs. 13%). Disaggregating by geographic area, food insecurity among climate-induced migrants appears to be concentrated in a handful of districts in Al Basrah, Diyala and Baghdad governorates. In Al Basrah, food insecurity is especially prevalent in **Al-Midaina, Abu Al-Khaseeb, Al-Zubair, Al-Qurna, Basrah** and **Shatt Al-Arab** districts. In Diyala, families are experiencing this challenge in **Al-Khalis** and **Ba'quba**, while in Baghdad, the issue is pronounced in **Mahmoudiya, Abu Ghraib** and **Karkh**.

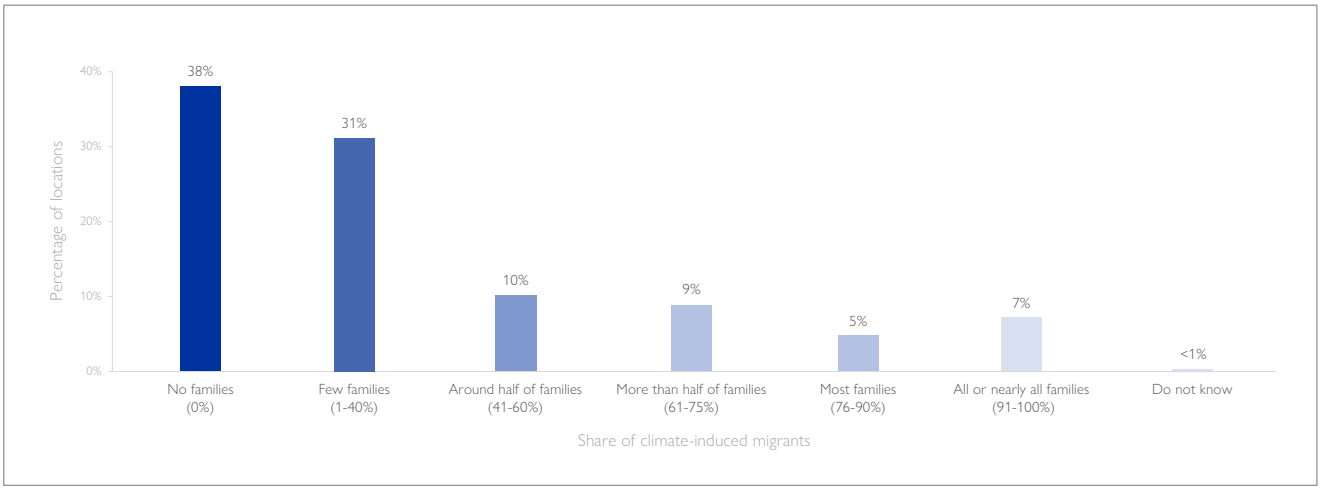
Levels of food insecurity were higher in locations where agriculture (self-employed or tenant), domestic work or transport were among the top livelihoods, as measured by the share of locations where around half or more families did not have enough money for food.

Figure 5: Inability to afford food among climate-induced migrants by share of locations

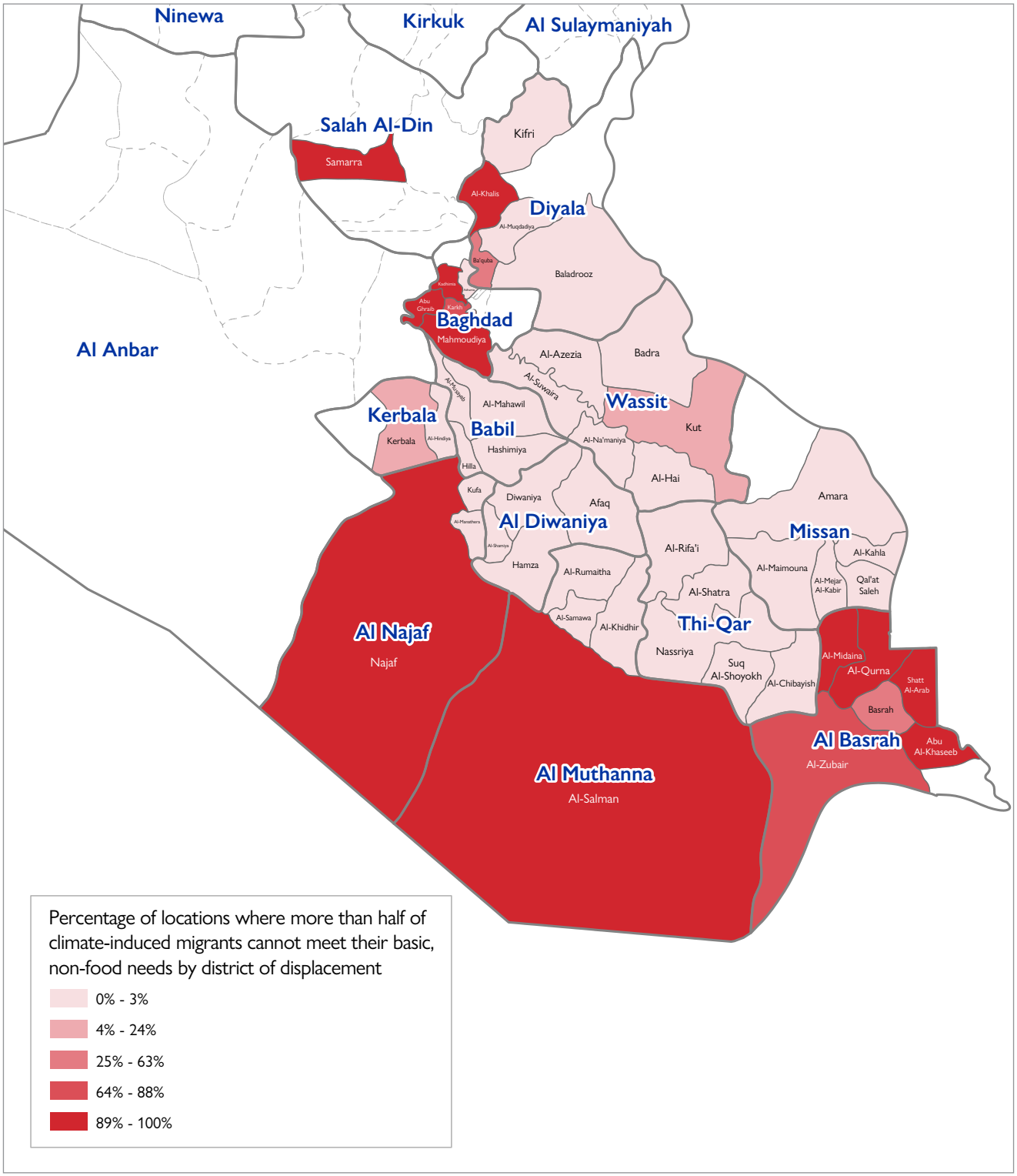



Additionally, in a fifth of locations (21%), more than half of climate-induced migrants did not have enough money for basic, non-food items. This level of financial precarity is therefore slightly more common than that linked to food insecurity. In line with the findings above, families in rural locations were more likely to face this challenge than those in urban locations. At the governorate level, larger shares of families are experiencing these financial difficulties in Salah Al-Din (100%), Baghdad (91%) and Al Basrah (85%). Districts of concern include **Abu Ghraib, Kadhimia, Mahmoudiya** and **Karkh** in Baghdad; **Al-Midaina**, **Abu Al-Khaseeb, Al-Qurna, Al-Zubair, Basrah** and **Shatt Al-Arab** in Al Basrah; **Al-Salman** in Al Muthanna; **Al-Khalis** in Diyala; **Samarra** in Salah Al-Din and **Najaf** in Al Najaf.

Figure 6: Inability to afford basic, non-food items among climate-induced migrants by share of locations



Map 5: Percentage of locations where more than half of climate-induced migrants did not have enough money for basic, non-food items (district level)




In an FGD conducted in Markaz Al-Nassriya, participants noted that the higher cost of living they faced after relocating to the city affected their standard of living, forcing them to go without certain basic needs.

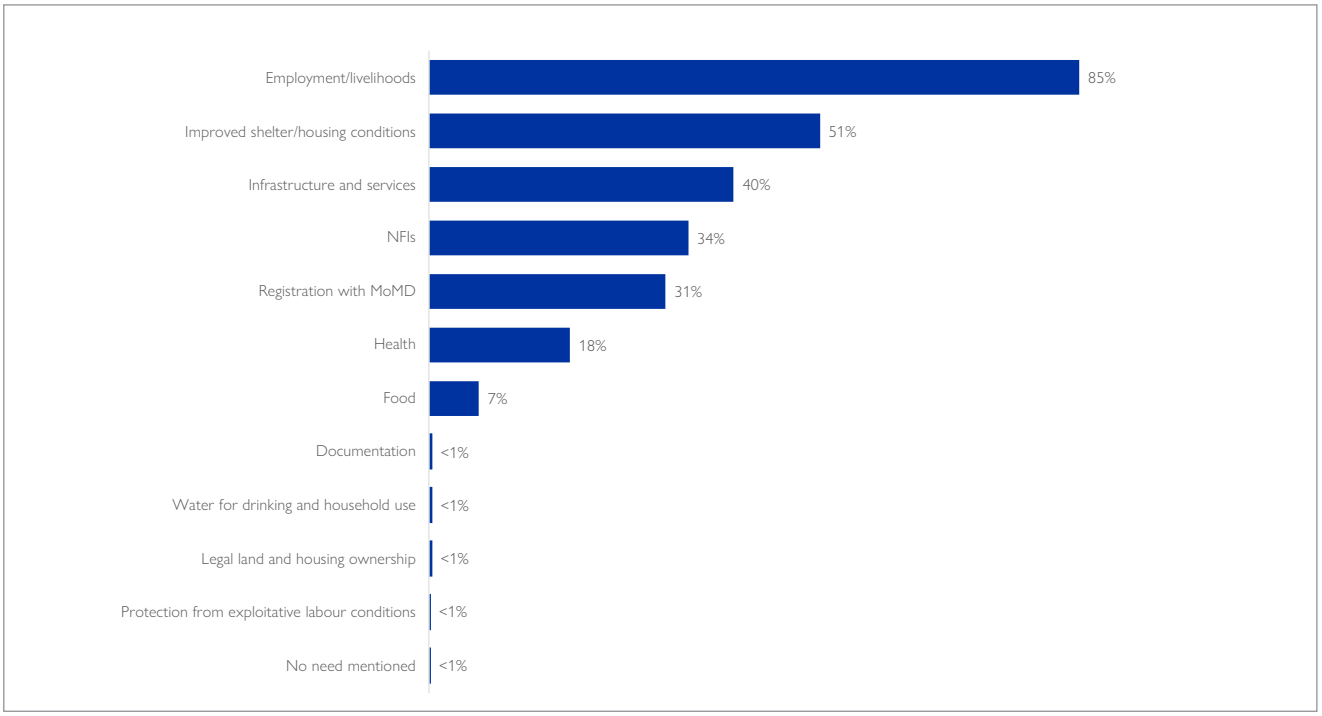
Moreover, considering participants were able to obtain food products directly from their livestock in their areas of origin, food items in their new locations were viewed as expensive.

## UNMET NEEDS

Bearing in mind the numerous challenges faced by climate-induced migrants, key informants were asked to indicate the top three needs of this group in the location of displacement. In line with the economic challenges described earlier, **livelihoods** were the most cited challenge, followed by **shelter** and **infrastructure and services**. Comparing rural and urban locations, key informants were more likely to highlight shelter as a concern in rural areas, whereas a greater share of urban key informants flagged registration with the Ministry of Migration and Displacement as 'drought and desertification IDPs.' This may reflect the fact that registration of this group has to date focused on southern Iraq and was only recently extended to include certain central Iraqi governorates.[44] Registration with MoMD would enable legal recognition as IDPs, provide assistance and documentation, enhance tenure security and facilitate inclusion in social protection systems.[45] On the other hand, similar shares in rural and urban locations pointed to livelihoods and infrastructure and services as top needs.

Disaggregating by geographic area, livelihoods appear to be a greater concern in southern Iraq, specifically Missan, Al Muthanna, Thi-Qar, Al-Diwaniya and Al Basrah, as well as Al Najaf. Shelter also represented a top need in southern governorates like Al-Diwaniya, Thi-Qar and Al Muthanna, along with Babil. On the other hand, key informants in central Iraq (Baghdad, Diyala, Salah Al-Din and Babil) tended to weigh non-food items and registration more heavily. Moreover, key informants in Missan flagged health care as a top need, while those in Al Basrah indicated food.

Figure 7: Top unmet needs of climate-induced migrants by percentage of locations (up to three answers permitted)



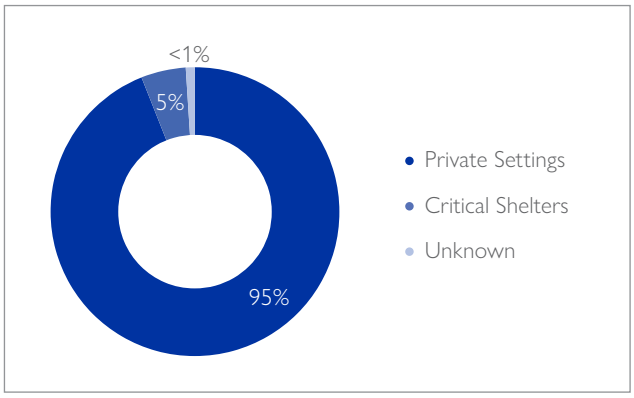

The top needs identified through the quantitative and qualitative assessments are generally consistent. In the FGDs, participants flagged **services** (especially schools, health care clinics and paving), **financial support and job training**, **improved tenure security** and **increased access to water** as key interventions needed. When it comes to addressing these needs, FGD participants pointed to Government actors, including local officials, the provincial councils, the Ministry of Agriculture and the Ministry of Migration and Displacement. However, respondents also suggested that non-government organizations had a role to play by advocating on their behalf to the Government and by constructing schools or health care clinics.

# HOUSING AND SERVICES

The economic challenges described in the previous section give rise to a variety of housing- and service-related issues. Firstly, climate-induced migrants may live in critical shelters (shelters in poor condition). Secondly, these new arrivals may rely on irregular housing arrangements and thus lack tenure security[46] (the legal right to remain on the land). Relatedly, climate-induced migrants may live on land that is not designated for residential use and lack permission from the Government to reside there. These latter two factors put them at heightened risk of eviction. Moreover, the irregular nature of these housing arrangements may result in exclusion from basic services such as public water and electricity.

## SHELTER TYPE

Figure 8: Shelter type by share of climate-induced migrants




In line with previous monitoring conducted by DTM, most families reside in private settings, with 5 per cent living in critical shelters. These dwellings are concentrated in Al-Diwaniya (86%) and, to a more limited extent, in Al Basrah (10%) and Wassit (4%). At the district level, families living in critical shelters are largely found in the subdistricts of **Al-Bdair** (24%), **Sumer** (12%) and **Markaz Afaq** (11%) in Afaq District; **Markaz al-Diwaniya** (17%) in Diwaniya District and **Al-Shinafiya** (12%) in Hamza District, Al-Diwaniya Governorate. Additionally, **Eaz al Din Selem** subdistrict in Al-Midaina District, Basrah Governorate hosts 7 per cent of climate-induced migrants in critical shelters.

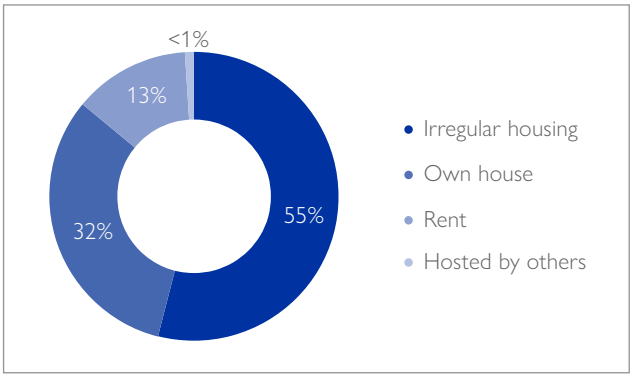
FGD participants emphasized that housing was among the most significant challenges they experienced after moving. Certain participants noted the burden of high rental costs in their locations of displacement. Others opted to purchase cheap land and construct a house over time with savings:

> *'For almost two months, we were homeless as we were building our house whenever we had the money.'*
>
> – Participants in Al-Haydariya subdistrict

Another participant, also in Al-Haydariya, indicated that due to a lack of financial means, their house was still not complete. Others, however, managed to improve their housing conditions with time. 'In the beginning, we lived in a rented house and the expenses were high,' recounted participants in Al-Haydariya. 'Those challenges remained for almost one year but ended after we bought land and built a house and now are enjoying some sort of stability in the area.'

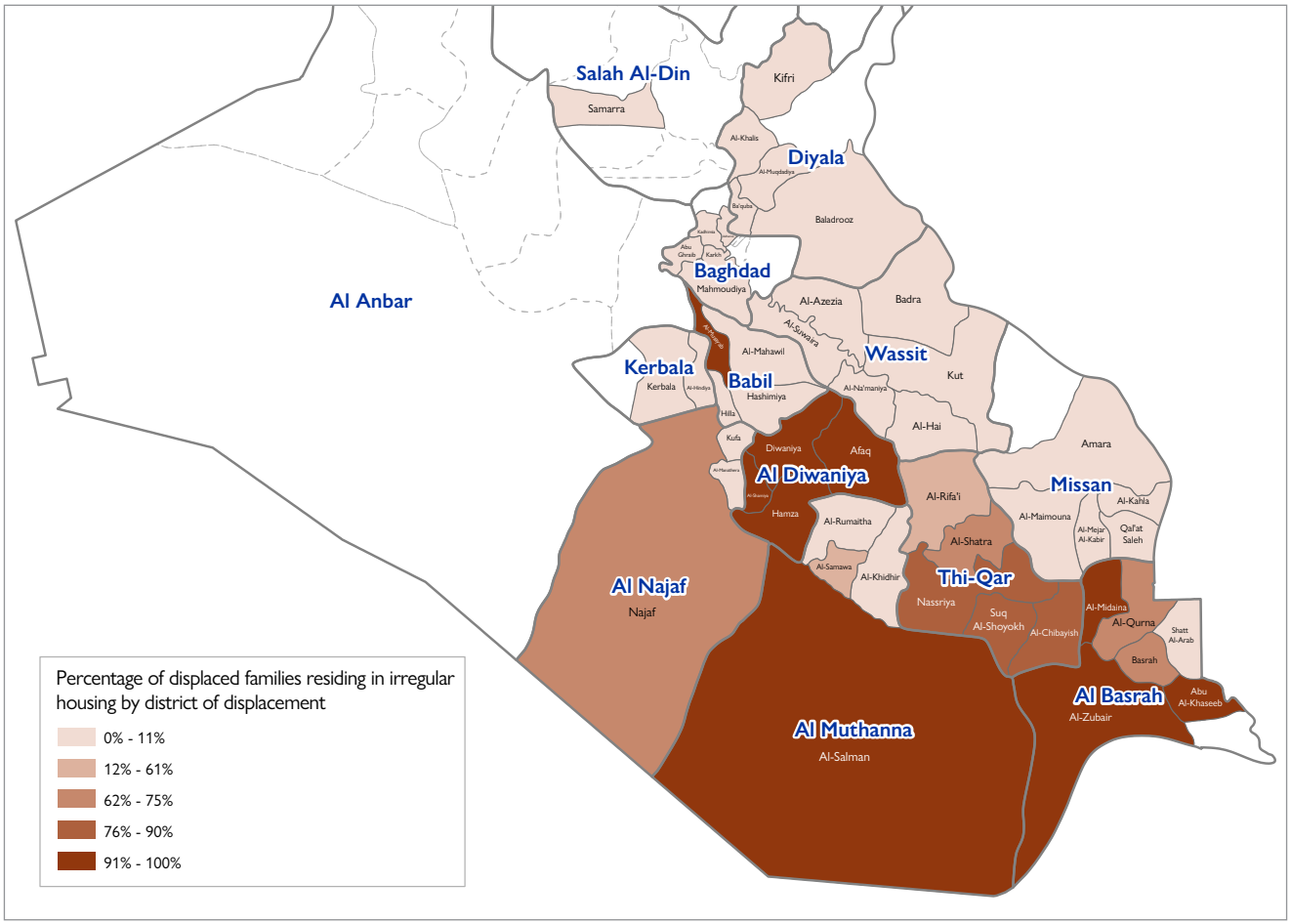
## HOUSING TENURE

Figure 9: Housing tenure by share of climate-induced migrants




Housing tenure refers to 'the arrangements under which the household occupies all or part of a housing unit,'[47] including through ownership, rental agreements or irregular arrangements. Just over half of families assessed rely on irregular housing arrangements (55%), while a third own their house (32%). Notably, only 13 per cent of families rent their accommodation, confirming the low shares observed in previous studies.[48] Irregular housing arrangements are the most common across all location types (rural, peri-urban and urban), although shares are higher in rural and peri-urban areas compared to urban ones (63% and 61% of families vs. 51%). Moreover, irregular housing arrangements appear to be more prevalent in southern Iraq, particularly in Al-Diwaniya (100% of families), Thi-Qar (84%) and Al Basrah (79%), along with Al Najaf (73%). Additionally, three quarters of families in Salah Al-Din are hosted by others (74%), which reflects a degree of housing precarity.

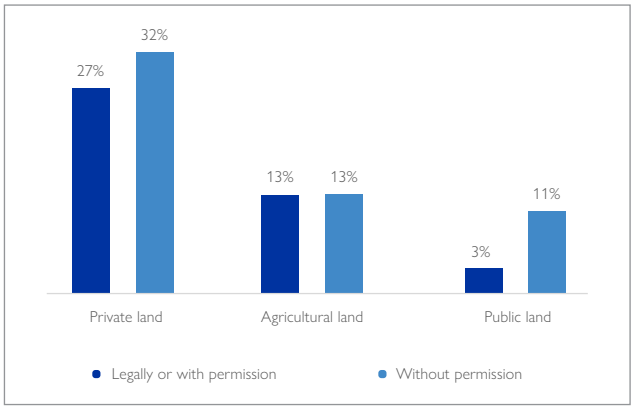
Map 6: Share of climate-induced migrants relying on irregular housing arrangements by district




## LAND TYPE

The land type indicator considers the legal categorization of the land as public, private or agricultural land and whether families received oral or written permission to reside on the land. Climate-induced migrants live on a variety of land types, with the most common being private land (59% of families) either with permission (27%) or without (32%). Additionally, around a quarter of families (26%) live on agricultural land either with or without permission (13% each). Overall, slightly more than half of families do not have permission to reside on the land (56%).

Figure 10: Land type by share of climate-induced migrants (with and without permission)

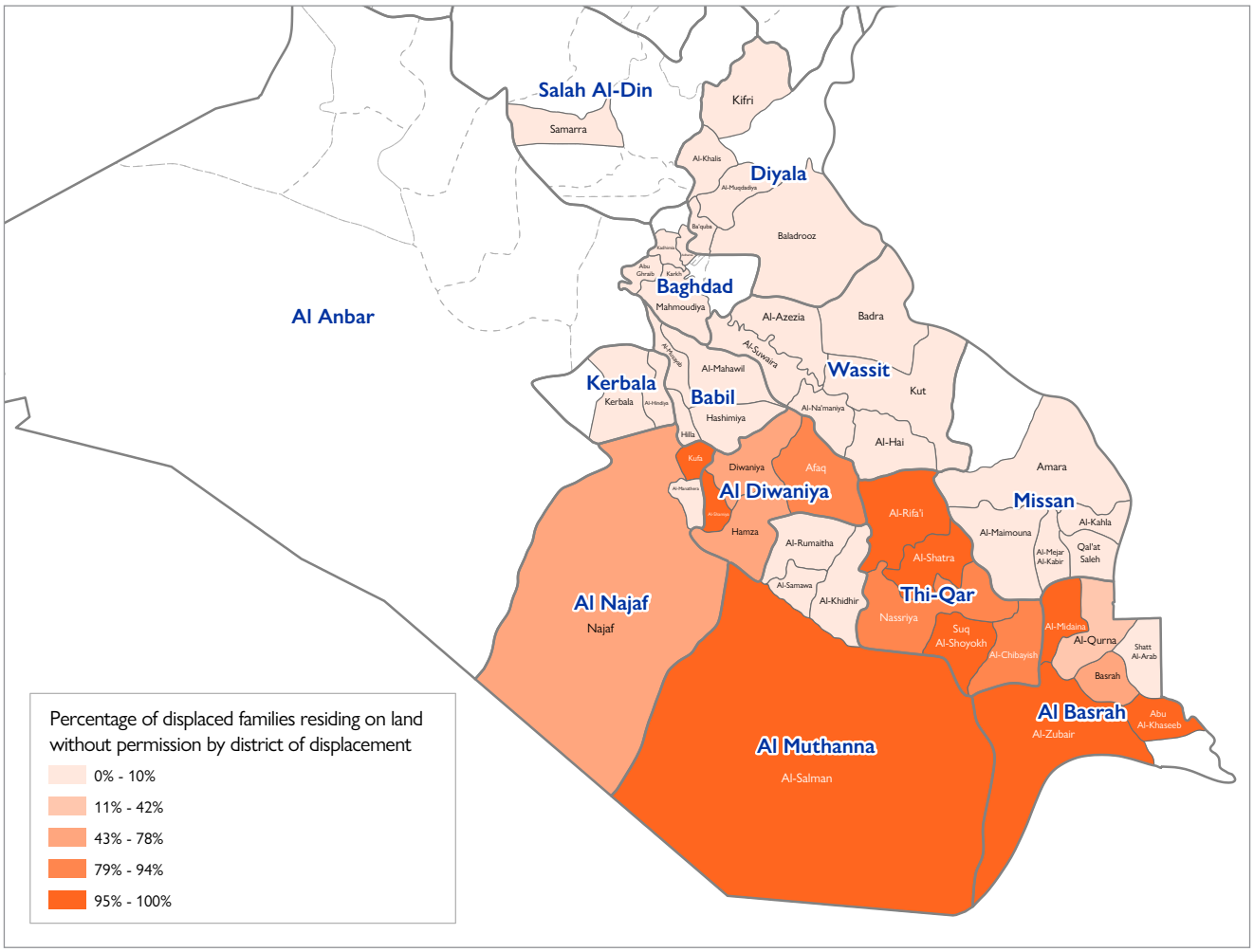



*Note: Percentages sum to less than 100 due to rounding.*

Across location types (rural, urban and peri-urban), the share of families living on land without permission does not vary significantly; what differs is the categorization of the land on which they reside. In rural areas, around two thirds of families reside on agricultural land (68%), with an approximately even split between those who have permission versus those who do not (32% and 36%, respectively). A further fifth live on private land without permission (20%). In peri-urban areas, a plurality of families live on agricultural land without permission (44%), along with a quarter on private land with permission (23%). Lastly, those in urban areas tend to live on private land either with permission (37%) or without (40%). However, a notable share of families also reside on public land without permission (15%).

The share of families residing on land without permission varies substantially by governorate. In **Thi-Qar**, nearly all climate-induced migrants live on land without permission (94%), most of whom are on private land (79%). A similar finding can be observed in **Al-Diwaniya**, with two thirds of families living on public land without permission (66%) and a further 17 per cent on agricultural land without permission. Additionally, **Al Najaf** and **Al Basrah** governorates have notable shares of families residing on land without permission (75% and 65%, respectively). However, in the case of Al Najaf, all families living without permission are on agricultural land (75%).

Map 7: Share of families residing on land without permission by district




FGD participants described a variety of housing arrangements, from renting on formal residential land to living in a house built informally on public or agricultural land. Participants in Al-Haydariya mentioned the inexpensive price of land, which was 'even cheaper than renting,' as a pull factor in their relocation. However, this arrangement presented its own challenges. Certain participants purchased the land, which was agricultural but owned by the Government, using Property Deed No. 35. This is considered a temporary deed, meaning the Government can reclaim it at any time. Participants expressed concerns that they would be forced to leave without a clear sense of where to go next, reflecting the tenuousness of this arrangement. Moreover, as highlighted by participants in Markaz Al-Nassriya and Al-Haydariya, because the houses are built on agricultural land, they lacked access to certain services like sanitation and paving, as described in the next section.

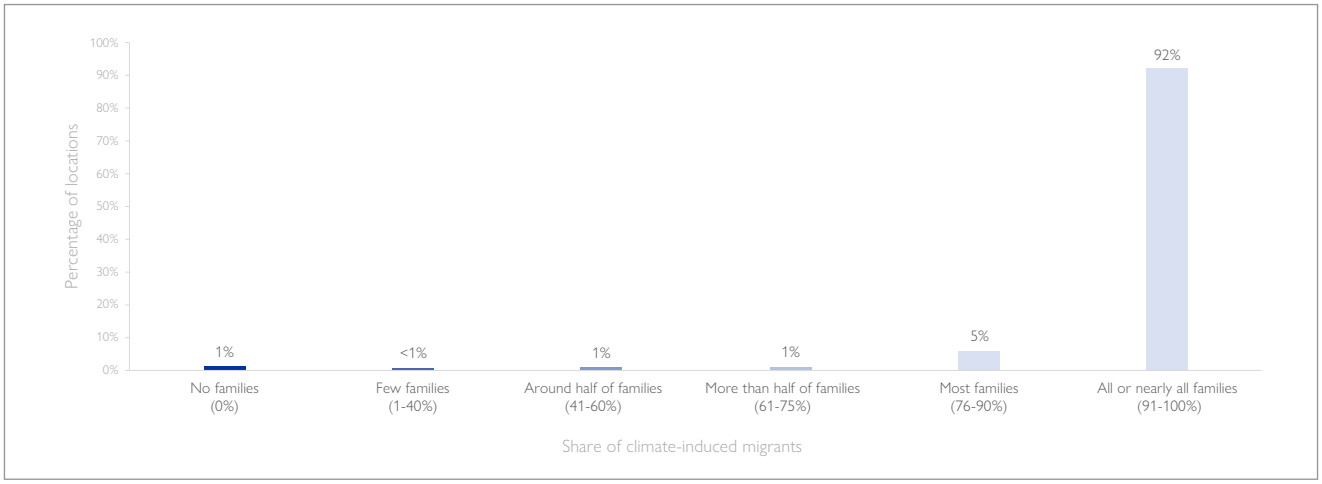
## SERVICES

Given the significant shares of climate-induced migrants relying on irregular housing arrangements, this group may struggle to access basic services. This section focusses on two essential services, namely public electricity and water, to understand the potential needs of climate-induced migrants as well as the degree to which their housing is connected to public networks. Follow-on studies should consider expanding the range of services assessed to include sanitation, health care, education and paving, as the absence of these services was flagged in the FGDs.

### Public water supply

This indicator assessed the share of climate-induced migrants who have official or unofficial connection to the public water supply (None (0%), Few (1-40%), Around half (41%-60%), More than half (61%-75%), Most families (76%-90%) or All or nearly all (91%-100%).

Figure 11: Access to the public water supply among climate-induced migrants by share of locations

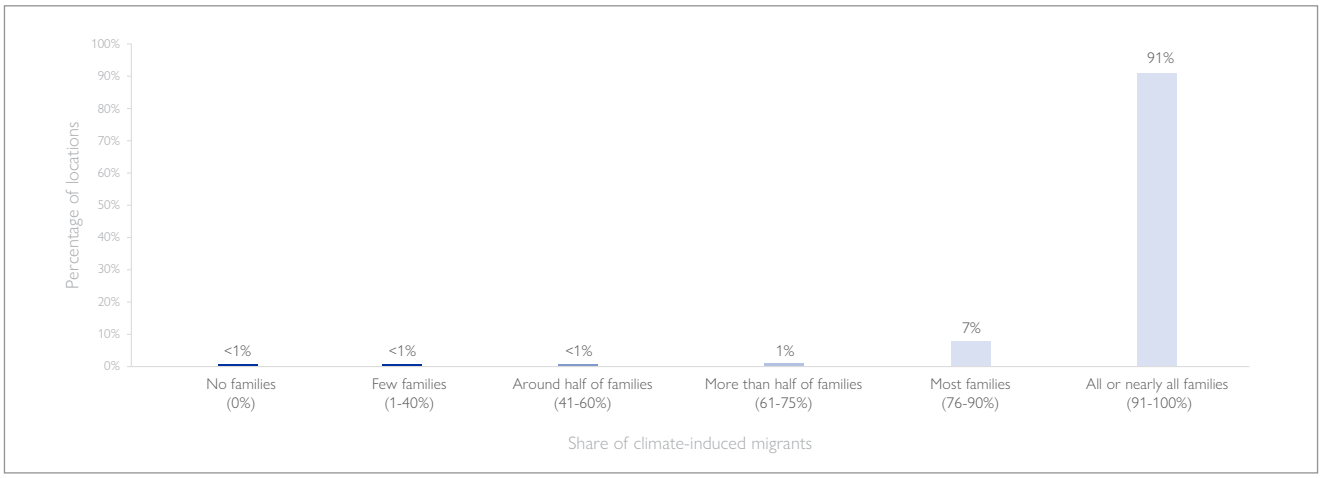



In most locations, all or nearly all climate-induced migrants have access to the public water supply (92% of locations). Access to the public water supply appears to be slightly weaker in rural and peri-urban areas compared to urban areas, with near universal access reported in 85 per cent of peri-urban locations, 87 per cent of rural locations and 94 per cent of urban locations. At the governorate level, half or fewer of the climate-induced migrants have access to the public water supply in 57 per cent of locations in **Babil**, 20 per cent of locations in **Salah Al-Din** and 10 per cent of locations in **Kerbala**. In Babil, subdistricts with reduced access include **Markaz Al-Hilla** in Hilla District, **Al-Niel** in Al-Mahawil District and **Al-Shomaly** in Hashimiya District. Climate-induced migrants are also experiencing this challenge in **Al-Zubaidiya** subdistrict in Al-Suwaira District, Wassit Governorate; **Al-Thaqar** subdistrict in Al-Qurna District, Al Basrah Governorate; **Al-Hurr** subdistrict in Kerbala District, Kerbala Governorate; **Ba'quba Centre** subdistrict in Ba'quba District, Diyala Governorate and **Markaz Samarra** subdistrict in Samarra District, Salah Al-Din Governorate.

## Public electricity supply

Similarly, in most locations, all or nearly all climate-induced migrants have official or unofficial access to the public electricity supply (91% of locations). The differences across location types are modest, with 85 per cent of peri-urban locations, 88 per cent of rural locations and 92 per cent of urban locations reporting near universal access. As with public water, certain areas in Salah Al-Din, Kerbala, Diyala and Wassit have reduced access to public electricity. This includes **Ba'quba Centre** subdistrict in Ba'quba District, Diyala Governorate; **Al-Hurr** subdistrict in Kerbala District, Kerbala Governorate; **Markaz Samarra** subdistrict in Samarra District, Salah Al-Din Governorate and **Al-Zubaidiya** subdistrict in Al-Suwaira District, Wassit Governorate.

Figure 12: Access to the public electricity supply among climate-induced migrants by share of locations




FGD participants in Al-Haydariya and Markaz Al-Nassriya highlighted the absence of other key services in their location of displacement, such as sanitation and paving. Moreover, in Markaz Al-Nassriya, certain participants lacked formal access to water and electricity, causing them to obtain it informally from nearby areas. In Al-Haydariya, a lack of schools and health care clinics was also flagged. During the discussion, participants cited other challenges which impacted their quality of life in the location of displacement. In Al-Haydariya, the presence of a nearby plastics factory contributed to air pollution and breathing difficulties for certain participants. These discussions underscore how economic precarity and irregular housing arrangements impact access to services and living conditions for climate-induced migrants, with important consequences for their overall well-being and health.

## EVICTIONS

Given the high rates of housing informality, climate-induced migrants may face greater risks of eviction. The report, *Migration into a Fragile Setting: Responding to Climate-Induced Informal Urbanization and Inequality in Basrah City, Iraq*, found that a greater share of households residing in high-migration areas of the city faced threats of eviction compared to households in low-migration areas.[49] However, in this assessment, climate-induced migrants were threatened with eviction in only two locations. Moreover, these threats did not materialize into actual evictions. Nevertheless, certain FGD participants in Al-Haydariya described facing threats and extortion from the local municipality related to the registration of their residence. Beyond this, the temporary nature of their housing tenure contributed to a feeling of insecurity for certain participants, even if it did not result in threats or experiences of eviction. These sentiments were echoed in a separate IOM legal needs assessment related to climate-induced migrants in Iraq.[50] In this report, climate-induced migrants living in informal sites in Basrah were reported to be at imminent risk of eviction as a result of construction projects. Additionally, those in Najaf expressed acute concerns over this issue, with a participant stating, 'We expect to receive an eviction notice at any minute.'[51]

# SOCIAL COHESION

Even though most climate-induced migrants are fellow Iraqi citizens, often coming from nearby areas, local residents may nevertheless hold negative perceptions of these new arrivals and attribute broader social and economic issues to their presence. In the Basra pilot study, respondents from the host community believed that climate-induced migrants increased competition for jobs, put pressure on resources and contributed to tensions in the community.[52] Almost no host community members acknowledged any positive outcomes from these new migration flows. Accordingly, this section of the assessment seeks to explore the impact of climate-induced displacement on social cohesion in locations of displacement. It considers experiences of discrimination, cases of abuse or exploitation, the degree of acceptance by the host community and any incidents of tension or conflict between climate-induced migrants and the host community.

One limitation to this analysis is the reliance on key informant interviews. Firstly, key informants may not be aware of all cases of discrimination, abuse or tension in the community. Secondly, social desirability bias may cause key informants to describe the situation in a more positive light than warranted and downplay negative events, out of a desire to present a favourable image of themselves and the community.[53] While insights from the FGDs strengthen these findings, replication of this study using individual or household-level surveys, along with more extensive qualitative methods, would help confirm the prevalence of social cohesion concerns.

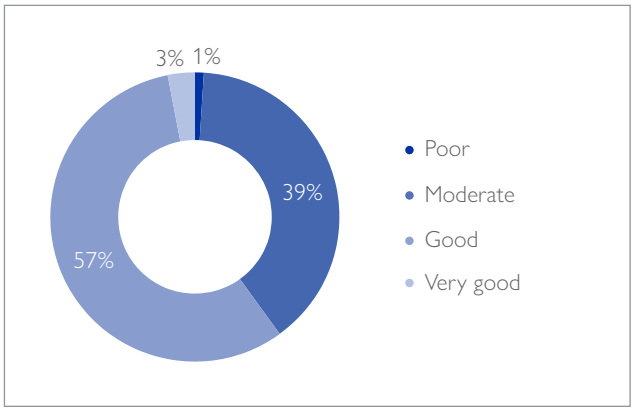
## DISCRIMINATION AND ABUSE

Key informants were asked whether climate-induced migrants in the location experienced discrimination related to services, education, employment, housing, property rights, political representation and daily interactions with the host community. Cases of discrimination were indicated in only seven locations (1% of total) in **Markaz Al-Samawa** subdistrict, Al-Samawa District and **Al-Najmi** and **Al-Warka** subdistricts in Al-Rumaitha District in Al Muthanna Governorate and **Markaz Abu Al-Khaseeb** subdistrict, Abu Al-Khaseen District and **Safwan** subdistrict, Al-Zubair District in Al Basrah Governorate. The incidents of discrimination concerned employment, housing, property rights, daily interactions and school enrolment. Moreover, no cases of abuse, violence or exploitation against climate-induced migrants were reported. As key informants may not be aware of all cases of discrimination or abuse, these findings should be confirmed through interviews with other members of the community, service providers and protection experts.

## ACCEPTANCE BY HOST COMMUNITY

This indicator measured the level of acceptance of climate-induced migrants by the host community on a scale of 1 to 5, with 1 being very poor relations and 5 being very good relations. In three in five locations (60%), key informants rated relations between climate-induced migrants and the host community as either 'good' or 'very good.' However, relations are considered moderate in two in five locations (39%). Key informants rated relations as more moderate in peri-urban locations compared to rural or urban locations. Moreover, in a minority of rural locations (4%), relations were deemed poor. Locations with poor relations were concentrated in **Al-Qurna** and **Basrah** districts in Al Basrah Governorate, as well as **Nassriya** district in Thi-Qar Governorate. Additionally, relations appear more moderate in Al-Diwaniya, Thi-Qar, Al Basrah and Kerbala governorates.

Figure 13: Level of acceptance of climate-induced migrants by share of locations




Findings from the FGDs underscore the relatively high degree of acceptance reported above. Participants in Markaz Al-Nassriya described being welcomed by the host community and participating in their social events like weddings and funerals. Remarks from the discussion in Al-Haydariya echoed these views. According to participants, 'we have become part of the community here and we do not consider ourselves IDPs.'

Given the subjectivity of this indicator, these findings should be validated using household- or individual-level interviews, as well as more extensive qualitative methods. Moreover, future studies should include climate-induced migrants and members of the host community to understand the full range of perspectives.

### TENSION

Lastly, no incidents of tension, disputes or violence between climate-induced migrants and the host community were reported in the three months prior to the assessment. Insights from the FGDs align with this finding. In Al-Haydariya, respondents stated there were no tensions with the host community. Moreover, the location itself was viewed as 'quite safe.' This was attributed to the fact that the climate-induced migrants were relatives from one tribe who knew each other, thus reducing the risk of tribal disputes. Similarly, participants in Markaz Al-Nassriya described a lack of security issues in their new location. Nevertheless, female participants mentioned that moving to a new location restricted the freedom of movement of women and girls. In their location of origin, girls could go out as part of their daily errands because those in the area were all relatives. Upon displacing, however, girls were not allowed to leave the house, in part due to their changing responsibilities and in part due to restrictions from their parents. At the same time, other female participants felt they had freedom of movement in their new, urban location, suggesting mixed outcomes for women and girls in displacement. Future studies should explore the relationship between social networks (or lack thereforeof), migration decision-making and women's freedom of movement.

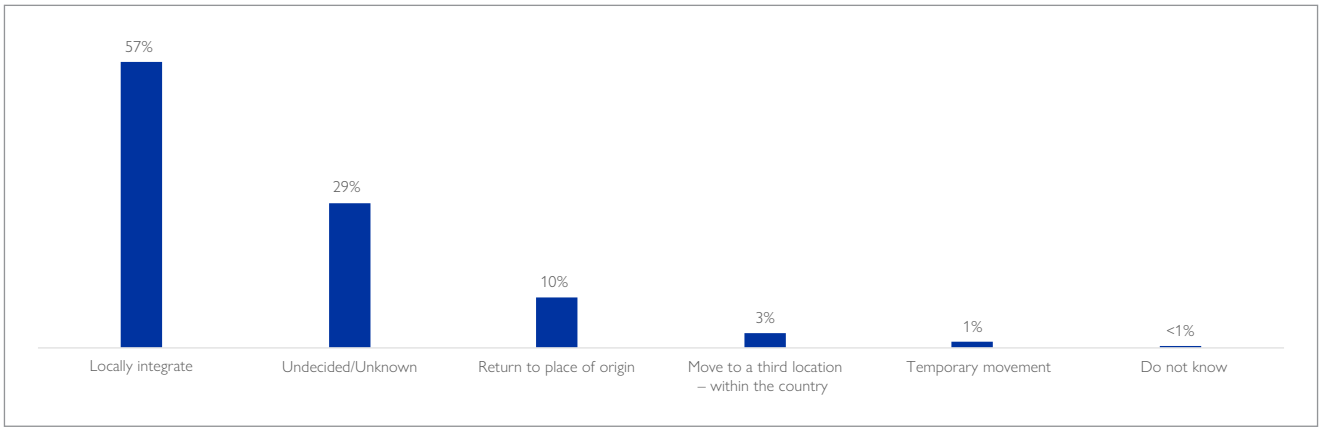
## INTENTIONS

### LONG-TERM INTENTIONS

Understanding future movement intentions is critical when designing programmes to assist climate-induced migrants, as these intentions shape where programming should be conducted and what activities are needed. Under this pillar, key informants were asked about the long-term plan (that is, 6 months or more) of most climate-induced migrants in the location: whether they prefer to return, remain where they are, move to a third location in the country, move abroad, engage in temporary migration or are undecided/unknown. Because key informants reported the intentions of the majority, it is recommended to confirm these findings using household- or individual-level surveys, given the inherently personalized nature of movement intentions.

In just over half of locations (57%), key informants indicated that climate-induced migrants intend to stay in their current location. This represents roughly half of the people displaced by climatic factors (55%). Moreover, in nearly 3 out of 10 locations, climate-induced migrants are reportedly undecided or do not know their future plans. Notably, key informants reported intentions to return in only 10 per cent of locations.

Figure 14: Movement intentions of most climate-induced migrants by share of locations, according to key informants




Intentions to stay are generally comparable across location types, with a slightly higher share reported in rural locations compared to urban and peri-urban locations (60% of rural locations vs. 56% of both urban and peri-urban locations). On the other hand, preferences to return appear to be slightly higher in urban locations compared to rural ones (11% vs. 8%, respectively).

Some important geographic distinctions can be observed when disaggregating by governorate and district of displacement. In central-northern governorates like Salah Al-Din, Baghdad and Diyala, key informants were more likely to indicate intentions to return than those in central-southern or southern Iraq. On the other hand, in Missan, Al Muthanna and Thi-Qar, key informants generally report that climate-induced migrants prefer to remain where they are. Moreover, in central-southern governorates such as Babil, Al Najaf, Wassit, Al Basrah and Al-Diwaniya, a greater share stated that climate-induced migrants were undecided about their future intentions. Lastly, key informants in parts of Thi-Qar, particularly Suq Al-Shoyokh and Al-Chibayish, suggest climate-induced migrants prefer to relocate elsewhere in the country.

Key informants were also asked whether climate-induced migrants had left the assessed location of displacement for another area. This trend was reported in only 5 per cent of locations, most notably from Afaq, Diwaniya and Hamza districts in Al-Diwaniya Governorate and Nassriya District in Thi-Qar Governorate. Notably, no climate-induced migrants moved abroad from their location of displacement. This may reflect barriers to international migration such as cost, immigration restrictions, lack of information and absence of social networks abroad.

FGD participants in Al-Haydariya and Markaz Al-Nassriya expressed a preference to stay in their current location. In Al-Haydariya, participants were discouraged from returning by a lack of livelihood opportunities and the risks of depending on agriculture given the need for water, fertilizer and favourable environmental conditions. Those in Markaz Al-Nassriya pointed to the availability of jobs as a reason to remain where they are. Access to services and health care were also highlighted as pull factors. Beyond this, participants described a more subjective process of adaptation and integration. 'We all intend to stay here and not return to our original area as we have begun to feel a sense of belonging here in Al Najaf…' noted participants in Al-Haydariya. Moreover, in Markaz Al-Nassriya, certain participants stated they would not return or move elsewhere even if agriculture resumes or other job opportunities become available. At the same time, other participants in Markaz Al-Nassriya chose to return to their area of origin due to the high cost of living and rent in their location of displacement. Thus, economic considerations and the degree of integration appear to be key factors influencing the intentions of climate-induced migrants.

# CONCLUSION

This study explores the living conditions of climate-induced migrants in their locations of displacement to understand their main needs and vulnerabilities. Considering the displacement caseload continues to grow each year,[54] it is important to develop programming and policy that addresses their needs and supports their integration within their new communities. By evaluating all known locations of displacement along the same, multi-sectoral criteria, the assessment supports evidence-based location selection and programme and policy design.

According to key informants, the top needs of climate-induced migrants include **livelihoods, shelter,** and **infrastructure and services**. With respect to livelihoods, climate-induced migrants are struggling to afford food and other basic items in governorates like Al Basrah, Diyala and Baghdad. Regarding shelter conditions, climate-induced migrants often rely on irregular housing arrangements and reside on land without permission. Moreover, Al-Diwaniya Governorate hosts the largest share of climate-induced migrants in critical shelters. Lastly, access to basic services among climate-induced migrants appears more limited in central Iraq, most notably in Salah Al-Din, Kerbala, Babil, Diyala and Wassit.

While climate-induced migrants share certain challenges with IDPs displaced by the 2014-2017 ISIL Crisis, they also have distinct needs, especially related to livelihoods and registration. Many climate-induced migrants engaged in agriculture and some continue to practice it after displacing. Therefore, climate-induced migrants require support to sustainably engage in agriculture and diversify their livelihoods. Moreover, climate-induced migrants face difficulties registering as IDPs due to varying eligibility criteria and practices between governorates, as well as broader skepticism toward the concept of climate-induced displacement. Therefore, further action is needed to address barriers to registration.

## AREA-BASED PROGRAMMING

In terms of geographic trends, climate-induced migrants in **Al Basrah Governorate** were more likely to face challenges meeting their basic needs, accessing formal housing and integrating within their new communities. Moreover, those residing in Thi-Qar report issues related to housing tenure, permission to reside on the land and acceptance by host community members. In **Salah Al-Din Governorate**, displaced individuals are struggling to meet their basic needs and access essential services like water and electricity. Lastly, residence in critical shelters was flagged as a challenge in **Al-Diwaniya Governorate**.

# ENDNOTES

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27 Ibid.

28 IOM, *DTM Iraq – Climate-Induced Displacement – Central and Southern Iraq (September 2024)* (Baghdad, 2025).

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30 For more information on Social Inquiry, please consult the organization's website here.

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39 In Iraq, a dunum is a farming unit equal to 2,500 square meters.

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42 Trapped populations are defined as those 'who do not migrate, yet are situated in areas under threat, […] at risk of becoming 'trapped' or having to stay behind, where they will be more vulnerable to environmental shocks and impoverishment. The notion of trapped populations applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected.' IOM, *International Migration Law No. 34, Glossary on Migration* (Geneva, 2019).

43 The map depicts the top 15 flows from their district of origin to their district of displacement. Intradistrict displacement is shown as a circular arrow.

44 As of December 2024, registration had taken place in Thi Qar, Missan, Al Najaf, Al Muthanna, Al Basra, Al-Diwaniya and Wassit governorates, according to the RARTs.

45 IOM, *Environmental Migration in Southern and Central Iraq: Assessing Access to Civil and Identity Documentation and Tenure Security* (Baghdad, 2024).

46 Tenure security is defined as 'the way land is held or owned by individuals and groups, or the set of relationships legally or customarily defined amongst people with respect to land. In other words, tenure reflects relationships between people and land directly, and between individuals and groups of people in their dealings in land.' Julian Quan and Geoffrey Payne, *Secure Land Rights for All*, UN-Habitat, Global Land Tool Network (Nairobi, 2008).

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IOM IRAQ

iraq.iom.int
iomiraq@iom.int

UNAMI Compound (Diwan 2),
International Zone,
Baghdad/Iraq

@IOMIraq

Foreign, Commonwealth & Development Office

IOM UN MIGRATION